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Page 1 of * 67 SECURITIES AND EXCHANGE COMMISSION File No WASHINGTON, D.C. 20549 Form 19b-4 Amendment No. (req. fo					* SR - 2016 - * 803 Amendments *)		
Filing by National Securities Clearing Corporation Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934							
Initial *	Amendment *	Withdrawal	Section 19(I	b)(2) * Section	on 19(b)(3)(A) * Rule	Section 19(b)(3)(B) *	
1 1101	ension of Time Period Commission Action *	Date Expires *	1 9b-4(f)(1) 1 9b-4(f)(4) 1 9b-4(f)(2) 1 9b-4(f)(5) 1 9b-4(f)(3) 1 9b-4(f)(6)				
Notice of prop Section 806(posed change pursuant t	to the Payment, Cleari Section 806(e)(2) *	ng, and Settle	nent Act of 2010	Security-Based Sw to the Securities Ex Section 3C(b)	-	
Exhibit 2 Sent As Paper Document Exhibit 3 Sent As Paper Document							
Description Provide a brief description of the action (limit 250 characters, required when Initial is checked *). To accelerate NSCC trade guaranty as well as to make other related changes described herein.							
Contact Information Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.							
First Name *	Rosa		Last Name *	Chang			
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0:							
Signature Pursuant to the requirements of the Securities Exchange Act of 1934,							
has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.							
Date 10/25	(Title *) 5/2016 Managing Director, Deputy General Counsel						
By Nikki Poulos (Name *) NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed. Persona Not Validated - 1459960765550,							

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549					
For complete Form 19b-4 instructions please refer to the EFFS website.					
Form 19b-4 Information * Add Remove View	The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.				
Exhibit 1 - Notice of Proposed Rule Change * Add Remove View	The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)				
Exhibit 1A- Notice of Proposed Rule Change, Security-Based Swap Submission, or Advance Notice by Clearing Agencies * Add Remove View	The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Sec curities Exchange Act Releases must include the release number, release date, Federal Register date, and corresponding file number (e.g., SR-[SRO] -xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)				
Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications Add Remove View Exhibit Sent As Paper Document	Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.				
Exhibit 3 - Form, Report, or Questionnaire Add Remove View Exhibit Sent As Paper Document	Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.				
Exhibit 4 - Marked CopiesAddRemoveView	The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.				
Add Remove View	The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change.				
Partial Amendment Add Remove View	If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.				

1. Text of Advance Notice

(a) This advance notice is being filed by National Securities Clearing Corporation ("NSCC" or "Corporation") in connection with modifications to NSCC's Rules & Procedures ("Rules")¹ in order to (i) accelerate NSCC's trade guaranty from midnight of one day after trade date ("T+1") to the point of trade comparison and validation for bilateral submissions or to the point of trade validation for locked-in submissions, (ii) add three new components to the Clearing Fund formula and eliminate the current Specified Activity charge from the Clearing Fund formula, (iii) amend Procedure II to remove language that permits NSCC to delay processing and reporting for certain index receipt transactions, (iv) enhance NSCC's current intraday mark-to-market margin process and clarify the circumstances and criteria for its intraday risk management monitoring and intraday collections of mark-to-market margin, (v) introduce a new loss allocation provision for any trades that fall within the proposed definition of "Off-the-Market Transactions" and (vi) make a technical change to Procedure XV to remove the reference to ID Net Subscribers, as described below.

- (b) Not applicable.
- (c) Not applicable.

2. Procedures of the Self-Regulatory Organization

The proposed changes were approved by the Risk Committee of the Board of Directors of NSCC at meetings duly called and held on February 13, 2013 and August 16, 2016.

3. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

Not applicable.

4. Self-Regulatory Organization's Statement on Burden on Competition

Not applicable.

5. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

In November 2013, NSCC distributed a White Paper to its Members that described the proposal. NSCC did not receive any written comments relating to this proposal in response to this White Paper. NSCC will notify the Commission of any written comments it receives.

6. Extension of Time Period for Commission Action

Not applicable.

¹ Capitalized terms not defined herein are defined in the Rules, <u>available at</u> http://dtcc.com/~/media/Files/Downloads/legal/rules/nscc_rules.pdf.

7. Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

- (a) Not applicable.
- (b) Not applicable.
- (c) Not applicable.
- (d) Not applicable.

8. Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission

Not applicable.

9. Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act

Not applicable.

10. Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing, and Settlement Supervision Act

Description of Change

(i) Accelerate the NSCC Trade Guaranty

Pursuant to Addendum K of the Rules, NSCC currently guarantees the completion of trades that are cleared and settled through NSCC's Continuous Net Settlement ("CNS")² system ("CNS trades") and through its Balance Order Accounting Operation³ ("Balance Order trades") that have reached the later of midnight of T+1 or midnight of the day they are reported to Members.⁴ NSCC proposes to amend its Rules in order to guarantee the completion of CNS trades and Balance Order trades upon comparison and validation for bilateral submissions to NSCC or upon validation for locked-in submissions to NSCC. Validation refers to the process whereby NSCC validates a locked-in trade, or compares and validates a bilateral trade, to confirm such trade has sufficient and correct information for clearance and settlement processing. For purposes of this description in the proposed rule change, the process of comparing and validating bilateral submissions and the process for validating locked-in submissions are

⁴ Today, shortened process trades, such as same-day and next-day settling trades, are already guaranteed upon comparison or trade recording processing.

 $^{^{2}}$ CNS and its operation are described in Rule 11 and Procedure VII.

³ The Balance Order Accounting Operation is described in Rule 5 and Procedure V. NSCC does not become a counterparty to Balance Order trades, but it does provide a trade guaranty to the receive and deliver parties that remains effective through close of business on the originally scheduled settlement date.

collectively referred to as "trade validation."

NSCC has previously shortened the time at which its trade guaranty applied to trades in response to processing developments and risk management considerations and to follow industry settlement cycles.⁵ Since implementation of the current trade guaranty policy, the marketplace has experienced significant change. The proposed accelerated trade guaranty and related proposed changes described herein would benefit the industry by mitigating counterparty risk and enhancing counterparties' ability to assess that risk by having NSCC become the central counterparty to CNS trades and by applying the trade guaranty to Balance Order trades at an earlier point in the settlement cycle.

The transfer of counterparty credit risk from Members to NSCC at an earlier point in the settlement cycle facilitates a shortened holding period of bilateral credit risk for counterparties by transferring the obligation onto NSCC, which is better equipped to manage that counterparty credit risk, including potential systemic impact, compared to the counterparties themselves.

In order to implement this proposed change, NSCC would amend Addendum K of its Rules⁶ to provide that CNS trades and Balance Order trades would be guaranteed by NSCC at the point of trade validation.⁷

NSCC also proposes to clarify in Addendum K⁸ that the guaranty of obligations arising out of the exercise or assignment of options that are settled at NSCC is not governed by Addendum K⁹ but by a separate arrangement between NSCC and The Options Clearing Corporation, as referred to in Procedure III of the Rules.¹⁰

(ii) <u>Proposed Enhancements to NSCC's Clearing Fund Formula</u>

In conjunction with accelerating the trade guaranty, NSCC would enhance its Clearing Fund formula to address the risks posed by the expanded trade guaranty. Specifically, NSCC

- ⁷ The proposed accelerated trade guaranty would not apply to items not currently guaranteed today.
- ⁸ <u>Supra</u> note 1.
- ⁹ <u>Id.</u>
- ¹⁰ <u>Id.</u>

See Securities Exchange Act Release Nos. 44648 (August 2, 2001), 66 FR 42245 (August 10, 2001) (SR-NSCC-2001-11); 35442 (March 3, 1995), 60 FR 13197 (March 10, 1995) (SR-NSCC-95-02); 35807 (June 5, 1995), 60 FR 31177 (June 13, 1995) (SR-NSCC-95-03); and 27192 (August 29, 1989), 54 FR 37010 (approving SR-NSCC-87-04, SR-MCC-87-03, and SR-SCCP-87-03 until December 31, 1990).

⁶ <u>Supra</u> note 1.

proposes to amend Procedure XV¹¹ (Clearing Fund Formula and Other Matters) to include three new components: the Margin Requirement Differential ("MRD"), the Coverage Component and the Intraday Backtesting Charge.

NSCC also proposes to add to Procedure XV^{12} a description of the enhanced intraday mark-to-market component of the Clearing Fund formula that clarifies the circumstances and criteria for the assessment of an intraday mark-to-market call. In addition, NSCC proposes to delete the Specified Activity charge, a component of the Clearing Fund formula that mitigates shortened cycle risk (that is, the risk of the trade guaranty attaching prior to collection of daily Clearing Fund). This charge would no longer be necessary because the MRD would mitigate those same risks.

A more detailed description of the foregoing changes follows:

A. The Required Deposit and the Accelerated Trade Guaranty

NSCC collects Required Deposits from all Members as margin to protect NSCC against losses in the event of a Member's default. The objective of the Required Deposit is to mitigate potential losses to NSCC associated with liquidation of the Member's portfolio if NSCC ceases to act for a Member (hereinafter referred to as a "default"). NSCC determines Required Deposit amounts using a risk-based margin methodology that is intended to capture market price risk. The methodology uses historical market moves to project or forecast the potential gains or losses on the liquidation of a defaulting Member's portfolio, assuming that a portfolio would take three days to liquidate or hedge in normal market conditions. The projected liquidation gains or losses are used to determine the Member's Required Deposit, which is calculated to cover projected liquidation losses to be at or above a 99 percent confidence level (the "Coverage Target"). The aggregate of all Members' Required Deposits constitutes NSCC's Clearing Fund, which NSCC would be able to access if a defaulting Member's own Required Deposit is insufficient to satisfy losses to NSCC caused by the liquidation of the Member's portfolio.

NSCC calculates and collects Required Deposits from Members daily. Each Member's daily Required Deposit is calculated based on the end-of-day positions from the prior day and is generally collected by 10:00 A.M. ET. NSCC's current trade guaranty does not generally attach to trades until midnight of T+1, after Required Deposits reflecting these trades have been collected. Therefore, Members' Required Deposits are generally sufficient to cover projected liquidation losses for guaranteed trades. However, under the accelerated trade guaranty proposal, NSCC's trade guaranty would attach to current-day trades immediately upon trade validation, before Required Deposits reflecting these trades have been collected (which NSCC refers to herein as the "coverage gap").¹³ Therefore, Members' Required Deposits may not be sufficient

¹² <u>Id.</u>

¹¹ <u>Id.</u>

¹³ The coverage gap is the period between the time that NSCC would guarantee a trade and the time that NSCC would collect additional margin to cover such trade.

to cover the projected liquidation losses of trades guaranteed by NSCC upon trade validation, and NSCC, absent the proposed Clearing Fund formula enhancements, could incur a loss associated with those trades if it ceases to act for a Member.

B. Addition of the MRD to the Clearing Fund Formula

The MRD is designed to help mitigate the risks posed to the Corporation by day-over-day fluctuations in a Member's portfolio by forecasting future changes in a Member's portfolio based on a historical look-back at each Member's portfolio over a given time period. A Member's portfolio may fluctuate significantly from one trading day to the next as the Member executes trades throughout the day. Currently, daily fluctuations in a Member's portfolio resulting from such trades do not pose any additional or different risk to NSCC because those trades are not guaranteed by NSCC until a Required Deposit reflecting such trades is collected by NSCC. However, under the accelerated trade guaranty proposal, trades would be guaranteed by NSCC upon trade validation and therefore may result in large un-margined intraday portfolio fluctuations during the coverage gap. The MRD would increase Members' Required Deposits by an amount calculated to cover forecasted fluctuations in Members' portfolios, based upon historical activity.

The MRD would be calculated and charged on a daily basis as a part of each Member's Required Deposit and consists of two components: the "MRD VaR" and the "MRD MTM." The MRD VaR looks at historical day-over-day positive changes in the start of day ("SOD") volatility component of a Member's Required Deposit¹⁴ ("Volatility Charge") over a 100-day look-back period and would be calculated to equal the exponentially weighted moving average ("EWMA") of such changes to the Member's Volatility Charge during the look-back period. The MRD MTM looks at historical day-over-day increases to the SOD mark-to-market component of a Member's Required Deposit¹⁵ over a 100-day look-back period and would be calculated to equal the EWMA of such changes to the Member's SOD mark-to-market component during the look-back period. The MRD is calculated to equal the sum of MRD VaR and MRD MTM times a multiplier calibrated based on backtesting results. NSCC has determined that a 100-day look-back period would provide it with a sufficient time series to reflect current market conditions.

By addressing the day-over-day changes to each Member's SOD Volatility Charge and SOD mark-to-market component, the MRD would help mitigate the risks posed to the Corporation by un-margined day-over-day fluctuations to a Member's portfolio resulting from intraday trading activity that would be guaranteed during the coverage gap.

¹⁴ The volatility component of the Clearing Fund formula for CNS trades and Balance Order trades is described in Procedure XV, Sections I.(A)(1)(a) and I.(A)(2)(a), respectively.

¹⁵ The SOD mark-to-market component of the Clearing Fund formula for CNS trades consists of Regular Mark-to-Market and ID Net Mark-to-Market, which are described in Procedure XV, Sections I.(A)(1)(b) and I.(A)(1)(c), respectively. The SOD mark-tomarket component of the Clearing Fund formula for Balance Order trades is described in Procedure XV, Section I.(A)(2)(b).

C. Addition of the Coverage Component to the Clearing Fund Formula

The "Coverage Component" is designed to mitigate the risks associated with a Member's Required Deposit being insufficient to cover projected liquidation losses to the Coverage Target by adjusting a Member's Required Deposit towards the Coverage Target. The Corporation would face increased exposure to a Member's un-margined portfolio as a result of the proposed accelerated trade guaranty and would have an increased need to have each Member's Required Deposit meet the Coverage Target. The Coverage Component would supplement the MRD by preemptively increasing a Member's Required Deposit in an amount calculated to forecast potential deficiencies in the margin coverage of a Member's guaranteed portfolio. The preemptive nature of the Coverage Component differentiates it from the Regular Backtesting Charge and the Intraday Backtesting Charge, both of which are reactive measures to increase the Member's Required Deposit to above the Coverage Target.

The Coverage Component would be calculated and charged on a daily basis as a part of each Member's Required Deposit. To calculate the Coverage Component, NSCC would compare the simulated liquidation profit and loss of a Member's portfolio, using the actual positions in the Member's portfolio and the actual historical returns on the security positions in the portfolio, against the sum of each of the following components of the Clearing Fund formula: the Volatility Charge, the MRD, the Illiquid Charge and the Market Maker domination charge (collectively, the "Market Risk Components"), to determine if there were any deficiencies between the amounts collected by these components and the simulated profit and loss of the Member's portfolio that would have been realized had it been liquidated during a 100-day lookback period. NSCC would then determine a daily "peak deficiency" amount for each Member equal to the maximum deficiency over a rolling 10 business day period for the preceding 100 days. The Coverage Component would be calculated to equal the EWMA of the peak deficiencies over the 100-day lookback period.

In working to bring each Member's Required Deposit towards the Coverage Target by preemptively collecting an amount designed to cover projected liquidation profit and loss of a Member's portfolio, including the trades guaranteed during the coverage gap, NSCC would further mitigate the risks posed to it by the proposed accelerated trade guaranty.

D. Addition of the Intraday Backtesting Charge to the Clearing Fund Formula

NSCC employs daily backtesting to determine the adequacy of each Member's Required Deposit. NSCC compares the Required Deposit¹⁶ for each Member with the simulated liquidation profit and loss using the actual positions in the Member's portfolio and the actual historical returns on the security positions in the portfolio. NSCC investigates the cause(s) of any backtesting deficiencies. As a part of this investigation, NSCC pays particular attention to Members with backtesting deficiencies that bring the results for that Member below the Coverage Target to determine if there is an identifiable cause of repeat backtesting deficiencies.

¹⁶ For backtesting comparisons, NSCC uses the Required Deposit amount without regard to the actual collateral posted by the Member.

NSCC also evaluates whether multiple Members experience backtesting deficiencies for the same underlying reason. Upon implementation of the accelerated trade guaranty, NSCC would employ a similar backtesting process on an intraday basis to determine the adequacy of each Member's Required Deposit. However, instead of backtesting a Member's Required Deposit against the Member's SOD portfolio, NSCC would use portfolios from two intraday time slices.¹⁷

1. <u>Calculation of the Intraday Backtesting Charge</u>

The objective of the Intraday Backtesting Charge is to increase Required Deposits for Members that are likely to experience intraday backtesting deficiencies on the basis described above by an amount sufficient to maintain such Member's intraday backtesting coverage above the Coverage Target. Members that maintain consistent end of day positions but have a high level of intraday trading activity pose risk to NSCC if they were to default intraday.

Because the intraday trading activity and size of the intraday backtesting deficiencies vary among impacted Members, NSCC must assess an Intraday Backtesting Charge that is specific to each impacted Member. To do so, NSCC examines each impacted Member's historical intraday backtesting deficiencies observed over the prior 12-month period to identify the five largest intraday backtesting deficiencies that have occurred during that time. The presumptive Intraday Backtesting Charge amount would equal that Member's fifth largest historical intraday backtesting deficiency, subject to adjustment as further described below. NSCC believes that applying an additional margin charge equal to the fifth largest historical intraday backtesting deficiency to a Member's Required Deposit would have brought the Member's historically observed intraday backtesting coverage above the Coverage Target.¹⁸

The Intraday Backtesting Charge would only be applicable to those Members whose overall 12-month trailing intraday backtesting coverage falls below the Coverage Target.

Although the fifth largest historical backtesting deficiency for a Member would be used as the Intraday Backtesting Charge in most cases, NSCC would retain discretion to adjust the charge amount based on other circumstances that might be relevant for assessing whether an impacted Member is likely to experience future backtesting deficiencies and the estimated size of such deficiencies. Examples of relevant circumstances that could be considered by NSCC in calculating the final, applicable Intraday Backtesting Charge amount include material differences among the Member's five largest intraday backtesting deficiencies observed over the prior 12month period, variability in the net settlement activity after the collection of the Member's

¹⁷ Intraday time slices are subject to change based upon market conditions and would include the positions from SOD plus any additional positions up to that time.

¹⁸ Intraday backtesting would include 500 observations per year (twice per day over 250 observation days). Each occurrence of a backtesting deficiency would reduce a Member's overall backtesting coverage by 0.2 percent (1 exception / 500 observations). Accordingly, an Intraday Backtesting Charge equal to the fifth largest backtesting deficiency would have brought backtesting coverage up to 99.2 percent.

Required Deposit and observed market price volatility in excess of the Member's historical Volatility Charge. Based on NSCC's assessment of the impact of these circumstances on the likelihood, and estimated size, of future intraday backtesting deficiencies for a Member, NSCC may, in its discretion, adjust the Intraday Backtesting Charge for such Member in an amount that NSCC determines to be more appropriate for maintaining such Member's intraday backtesting results above the Coverage Target.

The resulting Intraday Backtesting Charge would be added to the Required Deposit for such Member and would be imposed on a daily basis for a one-month period.

In order to differentiate the Backtesting Charge assessed on the start of the day portfolio from the Backtesting Charge assessed on an intraday basis, NSCC would amend the Rules by adding a defined term "Regular Backtesting Charge" to Procedure XV, Section I.(B)(3).¹⁹

2. <u>Communication with Members and Imposition of the Intraday</u> <u>Backtesting Charge</u>

If NSCC determines that an Intraday Backtesting Charge should apply to a Member who was not assessed an Intraday Backtesting Charge during the immediately preceding month or that the Intraday Backtesting Charge applied to a Member during the previous month should be increased, NSCC would notify the Member on or around the 25th calendar day of the month prior to the assessment of the Intraday Backtesting Charge or prior to the increase to the Intraday Backtesting Charge, as applicable, if not earlier.

NSCC would impose the Intraday Backtesting Charge as an additional charge applied to each impacted Member's Required Deposit on a daily basis for a one-month period and would review each applied Intraday Backtesting Charge each month. If an impacted Member's trailing 12-month intraday backtesting coverage exceeds the Coverage Target (without taking into account historically imposed Intraday Backtesting Charges), the Intraday Backtesting Charge would be removed.

E. Removal of the Specified Activity Charge from the Clearing Fund Formula

Currently, NSCC collects a Specified Activity charge, which is designed to cover the risk posed to NSCC by transactions that settle on a shortened cycle.²⁰ Such transactions pose an increased risk to NSCC because these trades settle on a shortened settlement cycle and may be guaranteed by NSCC prior to the collection of margin on them. The Specified Activity charge currently mitigates this risk by increasing the Required Deposit for a Member in relation to the number of Specified Activity trades submitted by the Member to NSCC over a 100-day lookback period. However, the risk posed to NSCC by Specified Activity would no longer be unique to such trade activity – the proposed accelerated trade guaranty would result in a similar risk to NSCC. The addition of the MRD and Coverage Components to the Clearing Fund formula

¹⁹ <u>Supra note 1.</u>

²⁰ Examples of these trades can include next day settling trades, same day settling trades, cash trades or sellers' options.

would mitigate the risks posed by trades guaranteed by NSCC prior to the collection of margin on those trades. As a result, NSCC proposes to eliminate the Specified Activity charge because imposing a separate Specified Activity charge would no longer be necessary once the MRD and Coverage Components are added to the Clearing Fund formula.

F. Enhanced Intraday Mark-to-Market Margining

NSCC proposes to enhance its current intraday margining to further mitigate the intraday coverage gap risk that may be introduced to the Corporation as a result of the proposed accelerated trade guaranty. By way of background, NSCC currently collects a SOD mark-tomarket margin, which is designed to mitigate the risk arising out of the value change between the contract/settlement value of a Member's open positions and the current market value, as part of its Clearing Fund formula. A Member's SOD mark-to-market margin is calculated and collected as part of a Member's daily Required Deposit based on the Member's prior end-of-day positions. The SOD mark-to-market component of the daily Required Deposit is calculated to cover a Member's exposure due to market moves and/or trading and settlement activity by bringing the portfolio of open positions up to the current market value. However, because the SOD mark-tomarket component is calculated only once daily using the prior end-of-day positions and prices, it will not cover a Member's exposure arising out of any intraday changes to position and market value in a Member's portfolio. Accordingly, NSCC currently collects intraday mark-to-market margin from Members to cover additional risk exposure arising out of intraday position and market value changes to the Member's portfolio if the additional risks are sufficiently large to warrant the collection of an intraday margin.

NSCC has determined that it is not necessary to collect intraday margin from every Member that experiences an intraday mark-to-market change because the Volatility Charge already collected as part of Members' daily Required Deposits is calculated to cover projected changes in the contract/settlement value of a Member's portfolio and likely cover intraday changes to a Member's portfolio. However, in certain instances, Members may have intraday mark-to-market changes that are significant enough that NSCC is exposed to an increased risk of loss as a result of such Member's intraday activities. In particular, NSCC measures each Member's intraday mark-to-market exposure against the Volatility Charge. NSCC collects an intraday mark-to-market amount from any Member that has an intraday mark-to-market exposure that meets or exceeds a threshold percentage as compared to the Member's Volatility Charge. NSCC believes that such Members pose an increased risk of loss to the Corporation because the coverage provided by the Volatility Charge, which is designed to cover estimated losses to a portfolio over a specified time period, would be exhausted by an intraday mark-tomarket exposure so large that the Member's Required Deposit would potentially be unable to absorb further intraday losses to the Member's portfolio.

In order to further mitigate the risk posed to NSCC by the proposed accelerated trade guaranty, NSCC is proposing to enhance its collection of intraday mark-to-market margin. NSCC would impose the intraday mark-to-market margin amount at a lower threshold. Currently, NSCC makes an intraday mark-to-market margin call if a Member's intraday mark-tomarket exposure meets or exceeds 100 percent of such Member's Volatility Charge; however, such threshold may be reduced by NSCC during volatile market conditions. With this proposal, NSCC would make an intraday margin call if a Member's intraday mark-to-market exposure meets or exceeds 80 percent of such Member's Volatility Charge, where such threshold may still be reduced by NSCC during volatile market conditions. This proposed change would serve to collect intraday margin earlier and more proactively preserve the coverage provided by a Member's Volatility Charge and Required Deposit.

In addition, NSCC would monitor intraday changes to Member's mark-to-market exposure at regular intervals to further mitigate the risk posed to NSCC by the accelerated trade guaranty. By doing so, NSCC would be able to make intraday margin calls more frequently to those Members whose intraday mark-to-market exposures exceed the Volatility Charge threshold. Enhancing the collection of the intraday mark-to-market amount so that it occurs earlier and more frequently would allow NSCC to reduce the amount of uncovered risk during the coverage gap and would therefore further mitigate the risk posed to the Corporation by the accelerated trade guaranty.

NSCC proposes to amend Procedure XV to include a description of the enhanced intraday mark-to-market margin charge that clarifies the circumstances and criteria for the assessment of an intraday mark-to-market call. This would ensure that Members are aware that the Corporation regularly monitors and considers intraday mark-to-market as part of its regular Clearing Fund formula.

G. Adjustments to the Calculation of the Excess Capital Premium Component

The Excess Capital Premium²¹ is designed to address spikes in a Member's Required Deposit based upon any one day of activity. It is not designed to provide additional Required Deposits over an extended period of time. Currently, the Excess Capital Premium for a Member is calculated based upon the Member's Clearing Fund Required Deposit and the Member's excess net capital. With the addition of the MRD and the Coverage Component, NSCC proposes to exclude these charges from the calculation of the Excess Capital Premium. The MRD and the Coverage Component all utilize a historical look-back period, which accounts for the risk of such activity well after the relevant trades have settled. Risks related to such trades would be reflected in increased amounts assessed for these components over the subsequent time periods. If these components are included in the calculation of the Excess Capital Premium, especially during periods following an increase in activity, then the increased MRD and Coverage Component could lead to more frequent Excess Capital Premium charges over an extended period of time. This is not the intended purpose of the Excess Capital Premium and could place an unnecessary burden on Members.

(iii) <u>Proposed Changes to Procedure II (Trade Comparison and Recording Service)</u>

Next day settling index receipts may be guaranteed prior to the collection of margin reflecting such trades and thus carry a very similar risk as Specified Activity trades described above. More specifically, because these trades are settled on the day after they are received and

²¹ The Excess Capital Premium is a charge imposed on a Member when the Member's Required Deposit exceeds its excess net capital, as described in Procedure XV.

validated by NSCC, NSCC currently attaches its guaranty to them at the time of validation, prior to the collection of a Required Deposit that reflects such trades. Unlike the risk from Specified Activity trades, which is mitigated by the Specified Activity charge, the risk for next day settling index receipts is currently mitigated by permitting NSCC to delay the processing and reporting of these trades if a Member's Required Deposit is not paid on time. However, like the risk associated with Specified Activity, under the proposed rule change, this risk would generally be mitigated by the addition of the MRD and the Coverage Component. Therefore, NSCC proposes to amend Procedure II²² (Trade Comparison and Recording Service) to remove the language that permits NSCC to delay the processing and reporting of next day settling index receipts until the applicable margin on these transactions is paid.

(iv) Loss Allocation Provision for Off-the-Market Transactions

NSCC proposes to introduce a new loss allocation provision for any trades that fall within the proposed definition of "Off-the-Market Transactions" in order to limit NSCC's exposure to certain trades that have a price that differs significantly from the prevailing market price for the underlying security at the time the trade is executed. This provision would apply in the event that NSCC ceases to act for a Member that engaged in Off-the-Market Transactions.²³

NSCC would define "Off-the-Market Transactions" as either a single transaction or a series of transactions settled within the same cycle with greater than \$1 million in gross proceeds and either higher or lower than the most recently observed market price by a percentage amount based on market conditions and factors that impact trading behavior of the underlying security, including volatility, liquidity and other characteristics of such security.

The proposed rule change would establish the loss allocation for Off-the-Market Transactions. NSCC would allocate any losses to NSCC resulting from the liquidation of any guaranteed, open Off-the-Market Transaction of a defaulted Member directly and entirely to the surviving counterparty to that transaction. Losses would be allocated to counterparties in proportion to their specific Off-the-Market Transaction gain and would be allocated only to the extent of NSCC's loss; however, no allocation shall be made if the defaulted Member has

²² <u>Supra note 1.</u>

A net loss on liquidation of the Off-the-Market Transaction means that the loss on liquidation of the Member's portfolio exceeds the collected Required Deposit of the Member and such loss is attributed to the Off-the-Market Transaction. Such loss would be allocated directly and entirely to the Member that submitted the Off-the-Market Transaction, or on whose behalf the Off-the-Market Transaction was submitted, to NSCC; however, no allocation would be made if such Member has satisfied all applicable intraday mark-to-market margin charges assessed by NSCC with respect to the Off-the-Market Transaction.

satisfied all requisite intraday mark-to-market margin assessed by NSCC with respect to the Off-the-Market Transaction.²⁴

This proposed change would allow NSCC to mitigate the risk of loss associated with guaranteeing these Off-the-Market Transactions. The proposal recognizes that applying the accelerated trade guaranty to transactions whose price significantly differs from the most recently observed market price could inappropriately increase the loss that NSCC may incur if a Member that has engaged in Off-the-Market Transactions defaults and its open, guaranteed positions are liquidated. Members not involved in Off-the-Market Transactions, or not involved in Off-the-Market Transactions that result in losses to NSCC, would not be included in this process. This exclusion would apply only to losses that are attributable to Off-the-Market Transactions and would not exclude Members from other obligations that may result from any loss or liabilities incurred by NSCC from a Member default.

In order to implement this proposed change, NSCC would amend Rule 4²⁵ (Clearing Fund) to provide that, if a loss or liability of NSCC is determined by NSCC to arise in connection with the liquidation of any Off-the-Market Transactions, such loss or liability would be allocated directly to the surviving counterparty to the Off-the-Market Transaction that submitted the transaction to NSCC for clearing. NSCC would also amend Rule 1²⁶ (Definitions and Descriptions) to include a definition of Off-the-Market Transactions.

(v) <u>Technical Proposed Rule Change</u>

NSCC is proposing a change to Procedure XV^{27} to clarify the calculation of the Regular Mark-to-Market component for CNS transactions. NSCC's historical and current policy for the calculation of any mark-to-market component of the Clearing Fund calculation for CNS trades and Balance Order trades is that where a credit is derived from a Member's mark-to-market calculation, the value of the calculation is adjusted to zero. When NSCC implemented the ID Net service,²⁸ a provision was added to Procedure XV^{29} that explicitly stated this policy as it relates to CNS transactions of subscribers to the ID Net service. This change inadvertently

²⁷ <u>Id.</u>

²⁴ A Member's Off-the-Market Transaction that has been marked to market is, by definition, no longer an Off-the-Market Transaction when the mark-to-market component of the Member's Required Deposit is satisfied.

²⁵ <u>Supra note 1.</u>

²⁶ <u>Id.</u>

²⁸ NSCC's ID Net service is defined further in Rule 65. Rules, <u>supra</u> note 1. <u>See</u> Securities Exchange Act Release No. 57901 (June 2, 2008), 73 FR 32373 (June 6, 2008) (SR-NSCC-2007-14).

²⁹ <u>Supra</u> note 1.

created an implication that the calculation of Regular Mark-to-Market credit for Members who were not ID Net Subscribers would not be set to zero. NSCC is proposing to revise the applicable provision to remove the reference to ID Net Subscribers.

Expected Effect on Risks to the Clearing Agency, Its Participants and the Market

The proposed rule changes would mitigate Member's counterparty risks and would enhance Members' ability to assess that risk by having NSCC become the central counterparty to CNS trades and by applying the trade guaranty to Balance Order trades at an earlier point in the settlement cycle.

Although the transfer of counterparty credit risk from Members to NSCC at an earlier point in the settlement cycle facilitates a shortened holding period of bilateral credit risk for the Members, it does increase risk to NSCC. However, as discussed below, NSCC believes that it is better equipped to manage that counterparty credit risk, including potential systemic impact, compared to the counterparties themselves.

Management of Identified Risks

The proposal is designed to mitigate counterparty risk while still protecting NSCC and its membership.

The proposed rule changes to (i) add the new components to the Clearing Fund formula and (ii) enhance the intraday mark-to-market margin process would allow NSCC to appropriately collect additional margin to mitigate the exposure presented to NSCC by the accelerated trade guaranty. The proposal to introduce a new loss allocation provision for Off-the-Market Transactions would help NSCC to limit its exposure to Off-the-Market Transactions.

Specifically, the proposal to add the MRD, the Coverage Component and the Intraday Backtesting Charge to the Clearing Fund formula and to collect intraday mark-to-market margin at a lower threshold would mitigate the exposure presented to NSCC by the accelerated trade guaranty and permit NSCC to enhance its margin requirements to better limit its credit exposures to participants under normal market conditions.

In addition, NSCC's proposal to expand its current intraday margin collection to include (a) the collection of intraday mark-to-market margin at a lower threshold and (b) the collection of the Intraday Backtesting Charge would further enhance its intraday monitoring and its ability to measure credit exposures at least once a day.

Similarly, the proposed rule changes to introduce a new loss allocation provision for any trades that fall within the proposed definition of Off-the-Market Transactions would help NSCC to limit its exposure to certain trades that have a price that differs significantly from the most recently observed market price for the underlying security. Therefore, the reduction of NSCC's exposure to Off-the-Market Transactions would assist NSCC in responding to a Member default and would minimize potential losses to NSCC and its non-defaulting Members.

NSCC has also taken actions outside of the proposals described in this filing to strengthen its liquidity resources and to enable it to cover its total liquidity needs, including any liquidity

needs that would arise from the accelerated trade guaranty. NSCC calculates its liquidity need by assuming the failure of the Member (including the simultaneous default of the Member's affiliated family) that has the largest net settlement debit in extreme but plausible market conditions.³⁰ Although the proposal would increase the number of days for which NSCC would be required, under its Rules, to guarantee settlement to include T and T+1 trades, the Rules currently provide that it may, although it is not legally obligated to, optionally guarantee these trades. Given NSCC's role in promoting safety, soundness and stability in the U.S. equities markets, NSCC currently includes these trades in its daily liquidity need analyses to account for the circumstances where this optional guaranty would be called upon. NSCC has never actually experienced a liquidity shortfall in the close out of a defaulted Member.

NSCC measures the potential liquidity impact of the accelerated trade guaranty on a daily basis. NSCC has enhanced its liquidity resources through the implementation of NSCC's supplemental liquidity deposit ("SLD") requirements.³¹ NSCC's SLD requirements were designed to require Members with historically elevated options activity to provide supplemental liquidity deposits in advance of and in anticipation of options expiry periods, as well as to accept voluntary pre-funded supplemental liquidity deposits from other Members who anticipate elevated liquidity needs during these periods. As such, the SLD requirements provide NSCC with the needed liquidity resources to address any liquidity shortfalls that may be experienced under the accelerated trade guaranty settlement cycle. Furthermore, NSCC has established a liquidity program to raise prefunded liquidity through the issuance and private placement of short-term, unsecured notes ("Prefunded Liquidity Program"), which may consist of a combination of commercial paper notes and extendible notes.³² Proceeds from the Prefunded Liquidity Program further supplement NSCC's existing default liquidity risk management resources.

Consistency with the Clearing Supervision Act

The objectives and principles of Section 805(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act entitled the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act") are to promote robust risk management, promote safety and soundness, reduce systemic risks, and support the stability of the broader financial system.³³

³² Securities Exchange Act Release No. 75730 (August 19, 2015), 80 FR 51638 (August 25, 2015) (SR-NSCC-2015-802).

³³ 12 U.S.C. 5464(b).

³⁰ Every day NSCC measures the liquidity obligations of each of NSCC's Members by taking the sum of their purchase obligations on that day from CNS and for the following three settlement days, and then, taking into account certain adjustments, assumptions and offsets, NSCC identifies the largest Member liquidity need on each day and, determines if the available liquidity resources are adequate to cover that largest liquidity need or if there is a projected liquidity shortfall.

³¹ Securities Exchange Act Release No. 70999 (December 5, 2013), 78 FR 75413 (December 11, 2013) (SR-NSCC-2013-02).

The proposal to accelerate the time that NSCC's trade guaranty attaches to trades submitted to it for clearing has been designed to promote robust risk management, promote safety and soundness, reduce systemic risks and support the stability of the broader financial system in furtherance of the Clearing Supervision Act. Specifically, NSCC would provide a trade guaranty to CNS trades and Balance Order trades at an earlier point in the settlement cycle. The proposed rule changes would mitigate counterparty risk and would enhance NSCC Members' ability to assess that risk by having NSCC become the central counterparty to CNS trades and by applying the trade guaranty to Balance Order trades at an earlier point in the settlement cycle. The transfer of counterparty credit risk from Members to NSCC at an earlier point in the settlement cycle facilitates a shortened holding period of bilateral credit risk for the counterparties by transferring the obligation onto NSCC, which is better equipped to manage that counterparty credit risk, including potential systemic impact, compared to the counterparties themselves. Therefore, NSCC believes the proposal to accelerate the trade guaranty would promote robust risk management, promote safety and soundness, reduce systemic risks and support the stability of the broader financial system, consistent with the objectives and principles of Section 805(b) of the Clearing Supervision Act cited above.

The proposed rule changes to enhance the Clearing Fund formula and to introduce a new loss allocation provision for Off-the-Market Transactions have been designed to promote robust risk management and promote safety and soundness in furtherance of the Clearing Supervision Act. In conjunction with the enhanced trade processing in the form of the accelerated trade guaranty, the proposed additional Clearing Fund components and enhancements to NSCC's current intraday mark-to-market margin process would allow NSCC to appropriately manage its risk by collecting additional margin to mitigate the exposure presented to NSCC by the accelerated trade guaranty. Additionally, the proposal to introduce a new loss allocation provision for any trades that fall within a proposed definition of "Off-the-Market Transactions" would help NSCC to limit its exposure to certain trades that have a price that differs significantly from the most recently observed market price for the underlying security. Together, the collection of additional margin and the reduction of NSCC's exposures to "Off-the-Market Transactions" would assist NSCC in responding to a Member default and would minimize potential losses to NSCC and its non-defaulting Members. Therefore, NSCC believes the proposed enhancements to the Clearing Fund formula and the introduction of an Off-the-Market Transaction allocation process would also promote robust risk management and promote safety and soundness, consistent with objectives and principles of Section 805(b) of the Clearing Supervision Act, cited above.

The proposal is also consistent with Rules 17Ad-22(b)(1) and (b)(2), promulgated under the Securities Exchange Act of 1934 ("Act"). Rule 17Ad-22(b)(1) requires NSCC to establish, implement, maintain and enforce written policies and procedures reasonably designed to measure its credit exposures to its participants at least once a day and limit its exposures to potential losses from defaults by its participants under normal market conditions so that the operations of NSCC would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.³⁴ NSCC's proposal to expand its current intraday margin collection to include (a) the collection of intraday mark-to-market margin at a lower threshold

³⁴ 17 CFR 240.17Ad-22(b)(1).

and (b) the collection of the Intraday Backtesting Charge would further enhance its intraday monitoring and its ability to measure credit exposures at least once a day. The proposal to enhance the amount of margin collected from each Member would help NSCC to limit its exposure to potential losses from defaults by its participants under normal market conditions and reduce risk of loss mutualization to the NSCC membership. Similarly, the proposal to introduce a new loss allocation provision for Off-the-Market Transactions would also help NSCC to limit its exposure to potential losses from defaults by its participants under normal market conditions. Therefore, NSCC believes the proposals are consistent with the requirements of Rule 17Ad-22(b)(1), promulgated under the Act, cited above.

Rule 17Ad-22(b)(2) requires NSCC to establish, implement, maintain and enforce written policies and procedures reasonably designed to "use margin requirements to limit its credit exposures to participants under normal market conditions and use risk-based models and parameters to set margin requirements."³⁵ The proposal to add the MRD, the Coverage Component and the Intraday Backtesting Charge to the Clearing Fund formula and to collect intraday mark-to-market margin at a lower threshold in order to mitigate the exposure presented to NSCC by the accelerated trade guaranty would enable NSCC to enhance its margin requirements to better limit its credit exposures to participants under normal market conditions. Therefore, NSCC believes the proposed changes are consistent with the requirements of Rule 17Ad-22(b)(2), promulgated under the Act, cited above.

The proposed changes to NSCC's Clearing Fund formula and the intraday margin process are also designed to be consistent with Rules 17Ad-22(e)(4) and (e)(6) of the Act, which were recently adopted by the Commission.³⁶ Rule 17Ad-22(e)(4) will require NSCC to establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those exposures arising from its payment, clearing, and settlement processes.³⁷ NSCC's proposal to expand its current intraday margin collection to include (a) the collection of intraday mark-to-market margin at a lower threshold and (b) the collection of the Intraday Backtesting Charge would enhance its ability to identify, measure, monitor and manage its credit exposures to participants. The proposal to enhance the amount of margin NSCC collected from each Member and to introduce a new loss allocation provision for Off-the-Market Transactions would further help NSCC to manage its credit exposures to participants and those exposures arising from its

³⁷ <u>See</u> Securities Exchange Act Release No. 78961 (September 28, 2016), 81 FR 70786 (October 13, 2016) (S7-03-14).

³⁵ 17 CFR 240.17Ad-22(b)(2).

³⁶ The Commission adopted amendments to Rule 17Ad-22, including the addition of new section 17Ad-22(e), on September 28, 2016. <u>See</u> Securities Exchange Act Release No. 78961 (September 28, 2016), 81 FR 70786 (October 13, 2016) (S7-03-14). The amendments to Rule 17ad-22 become effective on December 12, 2016. <u>Id.</u> NSCC is a "covered clearing agency" as defined in Rule 17Ad-22(a)(5) and must comply with new section (e) of Rule 17Ad-22 by April 11, 2017. <u>Id.</u>

payment, clearing, and settlement processes. Therefore, NSCC believes these proposals are consistent with the requirements of Rule 17Ad-22(e)(4), promulgated under the Act, cited above.

Rule 17Ad-22(e)(6) will require NSCC to establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that is monitored by management on an ongoing basis and regularly reviewed, tested, and verified.³⁸ The proposal to add the MRD, the Coverage Component and the Intraday Backtesting Charge to the Clearing Fund formula and to collect intraday mark-to-market margin at a lower threshold would help NSCC to cover its credit exposures to its participants by establishing a risk-based margin system that is monitored by management on an ongoing basis and regularly reviewed, tested, and verified. Therefore, NSCC believes this proposal is consistent with the requirements of Rule 17Ad-22(e)(6), promulgated under the Act, cited above.

Implementation Timeframe

Pending Commission approval, Members would be advised of the implementation date of this proposal through issuance of an NSCC Important Notice. NSCC expects to run the proposed changes in a test environment for a parallel period of at least three months prior to implementation. Details and dates regarding such test period would be communicated to Members through an NSCC Important Notice.

11. Exhibits

Exhibit 1 – Not applicable.

Exhibit 1A – Notice of advance notice for publication in the Federal Register.

Exhibit 2 – Not applicable.

Exhibit 3 – Not applicable.

Exhibit 4 – Not applicable.

Exhibit 5 – Proposed Changes to the Rules.

³⁸ Id.

EXHIBIT 1A

SECURITIES AND EXCHANGE COMMISSION (Release No. 34-[____]; File No. SR-NSCC-2016-803)

[DATE]

Self-Regulatory Organizations; National Securities Clearing Corporation; Notice of Filing of Advance Notice to Accelerate its Trade Guaranty, Add New Clearing Fund Components, Enhance its Intraday Risk Management, Provide for Loss Allocation of "Off-the-Market Transactions," and Make Other Changes

Pursuant to Section 806(e)(1) of Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act entitled the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act")¹ and Rule 19b-4(n)(1)(i) under the Securities Exchange Act of 1934 ("Act"),² notice is hereby given that on October 25, 2016, National Securities Clearing Corporation ("NSCC" or the "Corporation") filed with the Securities and Exchange Commission ("Commission") the advance notice SR-NSCC-2016-803 ("Advance Notice") as described in Items I, II and III below, which Items have been prepared by the clearing agency.³ The Commission is publishing this notice to solicit comments on the Advance Notice from interested persons.

I. <u>Clearing Agency's Statement of the Terms of Substance of the Advance Notice</u>

This Advance Notice consists of amendments to NSCC's Rules & Procedures

¹ 12 U.S.C. 5465(e)(1).

² 17 CFR 240.19b-4(n)(1)(i).

³ On October 25, 2016, NSCC filed this Advance Notice as a proposed rule change (SR-NSCC-2016-005) with the Commission pursuant to Section 19(b)(1) of the Act, 15 U.S.C. 78s(b)(1) and Rule 19b-4, 17 CFR 240.19b-4. A copy of the proposed rule change is <u>available at http://www.dtcc.com/legal/sec-rule-filings.aspx.</u>

("Rules")⁴ in order to (i) accelerate NSCC's trade guaranty from midnight of one day after trade date ("T+1") to the point of trade comparison and validation for bilateral submissions or to the point of trade validation for locked-in submissions, (ii) add three new components to the Clearing Fund formula and eliminate the current Specified Activity charge from the Clearing Fund formula, (iii) amend Procedure II to remove language that permits NSCC to delay processing and reporting for certain index receipt transactions, (iv) enhance NSCC's current intraday mark-to-market margin process and clarify the circumstances and criteria for its intraday risk management monitoring and intraday collections of mark-to-market margin, (v) introduce a new loss allocation provision for any trades that fall within the proposed definition of "Off-the-Market Transactions" and (vi) make a technical change to Procedure XV to remove the reference to ID Net Subscribers, as described below.

II. <u>Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the</u> <u>Advance Notice</u>

In its filing with the Commission, the clearing agency included statements concerning the purpose of and basis for the Advance Notice and discussed any comments it received on the Advance Notice. The text of these statements may be examined at the places specified in Item IV below. The clearing agency has prepared summaries, set forth in sections A and B below, of the most significant aspects of such statements.

(A) <u>Clearing Agency's Statement on Comments on the Advance Notice</u> <u>Received from Members, Participants, or Others</u>

NSCC has not received any written comments relating to this proposed rule

⁴ Capitalized terms not defined herein are defined in the Rules, available at <u>http://dtcc.com/~/media/Files/Downloads/legal/rules/nscc_rules.pdf</u>.

change. NSCC will notify the Commission of any written comments it receives.

(B) Advance Notice Filed Pursuant to Section 806(e) of the Payment, Clearing and Settlement Supervision Act

Description of Change

(i) Accelerate the NSCC Trade Guaranty

Pursuant to Addendum K of the Rules, NSCC currently guarantees the completion of trades that are cleared and settled through NSCC's Continuous Net Settlement ("CNS")⁵ system ("CNS trades") and through its Balance Order Accounting Operation⁶ ("Balance Order trades") that have reached the later of midnight of T+1 or midnight of the day they are reported to Members.⁷ NSCC proposes to amend its Rules in order to guarantee the completion of CNS trades and Balance Order trades upon comparison and validation for bilateral submissions to NSCC or upon validation for locked-in submissions to NSCC. Validation refers to the process whereby NSCC validates a locked-in trade, or compares and validates a bilateral trade, to confirm such trade has sufficient and correct information for clearance and settlement processing. For purposes of this description in the proposed rule change, the process of comparing and validating bilateral submissions and the process for validating locked-in submissions are collectively referred to as "trade validation."

⁵ CNS and its operation are described in Rule 11 and Procedure VII.

⁶ The Balance Order Accounting Operation is described in Rule 5 and Procedure V. NSCC does not become a counterparty to Balance Order trades, but it does provide a trade guaranty to the receive and deliver parties that remains effective through close of business on the originally scheduled settlement date.

⁷ Today, shortened process trades, such as same-day and next-day settling trades, are already guaranteed upon comparison or trade recording processing.

NSCC has previously shortened the time at which its trade guaranty applied to trades in response to processing developments and risk management considerations and to follow industry settlement cycles.⁸ Since implementation of the current trade guaranty policy, the marketplace has experienced significant change. The proposed accelerated trade guaranty and related proposed changes described herein would benefit the industry by mitigating counterparty risk and enhancing counterparties' ability to assess that risk by having NSCC become the central counterparty to CNS trades and by applying the trade guaranty to Balance Order trades at an earlier point in the settlement cycle.

The transfer of counterparty credit risk from Members to NSCC at an earlier point in the settlement cycle facilitates a shortened holding period of bilateral credit risk for counterparties by transferring the obligation onto NSCC, which is better equipped to manage that counterparty credit risk, including potential systemic impact, compared to the counterparties themselves.

In order to implement this proposed change, NSCC would amend Addendum K of its Rules⁹ to provide that CNS trades and Balance Order trades would be guaranteed by NSCC at the point of trade validation.¹⁰

 <u>See</u> Securities Exchange Act Release Nos. 44648 (August 2, 2001), 66 FR 42245 (August 10, 2001) (SR-NSCC-2001-11); 35442 (March 3, 1995), 60 FR 13197 (March 10, 1995) (SR-NSCC-95-02); 35807 (June 5, 1995), 60 FR 31177 (June 13, 1995) (SR-NSCC-95-03); and 27192 (August 29, 1989), 54 FR 37010 (approving SR-NSCC-87-04, SR-MCC-87-03, and SR-SCCP-87-03 until December 31, 1990).

⁹ <u>Supra</u> note 1.

¹⁰ The proposed accelerated trade guaranty would not apply to items not currently guaranteed today.

NSCC also proposes to clarify in Addendum K^{11} that the guaranty of obligations arising out of the exercise or assignment of options that are settled at NSCC is not governed by Addendum K^{12} but by a separate arrangement between NSCC and The Options Clearing Corporation, as referred to in Procedure III of the Rules.¹³

(ii) <u>Proposed Enhancements to NSCC's Clearing Fund Formula</u>

In conjunction with accelerating the trade guaranty, NSCC would enhance its Clearing Fund formula to address the risks posed by the expanded trade guaranty. Specifically, NSCC proposes to amend Procedure XV^{14} (Clearing Fund Formula and Other Matters) to include three new components: the Margin Requirement Differential ("MRD"), the Coverage Component and the Intraday Backtesting Charge.

NSCC also proposes to add to Procedure XV¹⁵ a description of the enhanced intraday mark-to-market component of the Clearing Fund formula that clarifies the circumstances and criteria for the assessment of an intraday mark-to-market call. In addition, NSCC proposes to delete the Specified Activity charge, a component of the Clearing Fund formula that mitigates shortened cycle risk (that is, the risk of the trade guaranty attaching prior to collection of daily Clearing Fund). This charge would no longer be necessary because the MRD would mitigate those same risks.

- ¹³ <u>Id.</u>
- ¹⁴ Id.
- ¹⁵ Id.

¹¹ Supra note 1.

¹² <u>Id.</u>

A more detailed description of the foregoing changes follows:

A. The Required Deposit and the Accelerated Trade Guaranty

NSCC collects Required Deposits from all Members as margin to protect NSCC against losses in the event of a Member's default. The objective of the Required Deposit is to mitigate potential losses to NSCC associated with liquidation of the Member's portfolio if NSCC ceases to act for a Member (hereinafter referred to as a "default"). NSCC determines Required Deposit amounts using a risk-based margin methodology that is intended to capture market price risk. The methodology uses historical market moves to project or forecast the potential gains or losses on the liquidation of a defaulting Member's portfolio, assuming that a portfolio would take three days to liquidate or hedge in normal market conditions. The projected liquidation gains or losses are used to determine the Member's Required Deposit, which is calculated to cover projected liquidation losses to be at or above a 99 percent confidence level (the "Coverage Target"). The aggregate of all Members' Required Deposits constitutes NSCC's Clearing Fund, which NSCC would be able to access if a defaulting Member's own Required Deposit is insufficient to satisfy losses to NSCC caused by the liquidation of the Member's portfolio.

NSCC calculates and collects Required Deposits from Members daily. Each Member's daily Required Deposit is calculated based on the end-of-day positions from the prior day and is generally collected by 10:00 A.M. ET. NSCC's current trade guaranty does not generally attach to trades until midnight of T+1, after Required Deposits reflecting these trades have been collected. Therefore, Members' Required Deposits are generally sufficient to cover projected liquidation losses for guaranteed trades. However, under the accelerated trade guaranty proposal, NSCC's trade guaranty would attach to current-day trades immediately upon trade validation, before Required Deposits reflecting these trades have been collected (which NSCC refers to herein as the "coverage gap").¹⁶ Therefore, Members' Required Deposits may not be sufficient to cover the projected liquidation losses of trades guaranteed by NSCC upon trade validation, and NSCC, absent the proposed Clearing Fund formula enhancements, could incur a loss associated with those trades if it ceases to act for a Member.

B. Addition of the MRD to the Clearing Fund Formula

The MRD is designed to help mitigate the risks posed to the Corporation by dayover-day fluctuations in a Member's portfolio by forecasting future changes in a Member's portfolio based on a historical look-back at each Member's portfolio over a given time period. A Member's portfolio may fluctuate significantly from one trading day to the next as the Member executes trades throughout the day. Currently, daily fluctuations in a Member's portfolio resulting from such trades do not pose any additional or different risk to NSCC because those trades are not guaranteed by NSCC until a Required Deposit reflecting such trades is collected by NSCC. However, under the accelerated trade guaranty proposal, trades would be guaranteed by NSCC upon trade validation and therefore may result in large un-margined intraday portfolio fluctuations during the coverage gap. The MRD would increase Members' Required Deposits by an amount calculated to cover forecasted fluctuations in Members' portfolios, based upon

16

The coverage gap is the period between the time that NSCC would guarantee a trade and the time that NSCC would collect additional margin to cover such trade.

historical activity.

The MRD would be calculated and charged on a daily basis as a part of each Member's Required Deposit and consists of two components: the "MRD VaR" and the "MRD MTM." The MRD VaR looks at historical day-over-day positive changes in the start of day ("SOD") volatility component of a Member's Required Deposit¹⁷ ("Volatility Charge") over a 100-day look-back period and would be calculated to equal the exponentially weighted moving average ("EWMA") of such changes to the Member's Volatility Charge during the look-back period. The MRD MTM looks at historical dayover-day increases to the SOD mark-to-market component of a Member's Required Deposit¹⁸ over a 100-day look-back period and would be calculated to equal the EWMA of such changes to the Member's SOD mark-to-market component during the look-back period. The MRD is calculated to equal the sum of MRD VaR and MRD MTM times a multiplier calibrated based on backtesting results. NSCC has determined that a 100-day look-back period would provide it with a sufficient time series to reflect current market conditions.

By addressing the day-over-day changes to each Member's SOD Volatility Charge and SOD mark-to-market component, the MRD would help mitigate the risks

¹⁷ The volatility component of the Clearing Fund formula for CNS trades and Balance Order trades is described in Procedure XV, Sections I.(A)(1)(a) and I.(A)(2)(a), respectively.

¹⁸ The SOD mark-to-market component of the Clearing Fund formula for CNS trades consists of Regular Mark-to-Market and ID Net Mark-to-Market, which are described in Procedure XV, Sections I.(A)(1)(b) and I.(A)(1)(c), respectively. The SOD mark-to-market component of the Clearing Fund formula for Balance Order trades is described in Procedure XV, Section I.(A)(2)(b).

posed to the Corporation by un-margined day-over-day fluctuations to a Member's portfolio resulting from intraday trading activity that would be guaranteed during the coverage gap.

C. Addition of the Coverage Component to the Clearing Fund Formula

The "Coverage Component" is designed to mitigate the risks associated with a Member's Required Deposit being insufficient to cover projected liquidation losses to the Coverage Target by adjusting a Member's Required Deposit towards the Coverage Target. The Corporation would face increased exposure to a Member's un-margined portfolio as a result of the proposed accelerated trade guaranty and would have an increased need to have each Member's Required Deposit meet the Coverage Target. The Coverage Component would supplement the MRD by preemptively increasing a Member's Required Deposit in an amount calculated to forecast potential deficiencies in the margin coverage of a Member's guaranteed portfolio. The preemptive nature of the Coverage Component differentiates it from the Regular Backtesting Charge and the Intraday Backtesting Charge, both of which are reactive measures to increase the Member's Required Deposit to above the Coverage Target.

The Coverage Component would be calculated and charged on a daily basis as a part of each Member's Required Deposit. To calculate the Coverage Component, NSCC would compare the simulated liquidation profit and loss of a Member's portfolio, using the actual positions in the Member's portfolio and the actual historical returns on the security positions in the portfolio, against the sum of each of the following components of the Clearing Fund formula: the Volatility Charge, the MRD, the Illiquid Charge and the Market Maker domination charge (collectively, the "Market Risk Components"), to determine if there were any deficiencies between the amounts collected by these components and the simulated profit and loss of the Member's portfolio that would have been realized had it been liquidated during a 100-day look-back period. NSCC would then determine a daily "peak deficiency" amount for each Member equal to the maximum deficiency over a rolling 10 business day period for the preceding 100 days. The Coverage Component would be calculated to equal the EWMA of the peak deficiencies over the 100-day look-back period.

In working to bring each Member's Required Deposit towards the Coverage Target by preemptively collecting an amount designed to cover projected liquidation profit and loss of a Member's portfolio, including the trades guaranteed during the coverage gap, NSCC would further mitigate the risks posed to it by the proposed accelerated trade guaranty.

D. Addition of the Intraday Backtesting Charge to the Clearing Fund Formula

NSCC employs daily backtesting to determine the adequacy of each Member's Required Deposit. NSCC compares the Required Deposit¹⁹ for each Member with the simulated liquidation profit and loss using the actual positions in the Member's portfolio and the actual historical returns on the security positions in the portfolio. NSCC investigates the cause(s) of any backtesting deficiencies. As a part of this investigation, NSCC pays particular attention to Members with backtesting deficiencies that bring the

¹⁹ For backtesting comparisons, NSCC uses the Required Deposit amount without regard to the actual collateral posted by the Member.

results for that Member below the Coverage Target to determine if there is an identifiable cause of repeat backtesting deficiencies. NSCC also evaluates whether multiple Members experience backtesting deficiencies for the same underlying reason. Upon implementation of the accelerated trade guaranty, NSCC would employ a similar backtesting process on an intraday basis to determine the adequacy of each Member's Required Deposit. However, instead of backtesting a Member's Required Deposit against the Member's SOD portfolio, NSCC would use portfolios from two intraday time slices.²⁰

1. <u>Calculation of the Intraday Backtesting Charge</u>

The objective of the Intraday Backtesting Charge is to increase Required Deposits for Members that are likely to experience intraday backtesting deficiencies on the basis described above by an amount sufficient to maintain such Member's intraday backtesting coverage above the Coverage Target. Members that maintain consistent end of day positions but have a high level of intraday trading activity pose risk to NSCC if they were to default intraday.

Because the intraday trading activity and size of the intraday backtesting deficiencies vary among impacted Members, NSCC must assess an Intraday Backtesting Charge that is specific to each impacted Member. To do so, NSCC examines each impacted Member's historical intraday backtesting deficiencies observed over the prior 12-month period to identify the five largest intraday backtesting deficiencies that have

²⁰ Intraday time slices are subject to change based upon market conditions and would include the positions from SOD plus any additional positions up to that time.

occurred during that time. The presumptive Intraday Backtesting Charge amount would equal that Member's fifth largest historical intraday backtesting deficiency, subject to adjustment as further described below. NSCC believes that applying an additional margin charge equal to the fifth largest historical intraday backtesting deficiency to a Member's Required Deposit would have brought the Member's historically observed intraday backtesting coverage above the Coverage Target.²¹

The Intraday Backtesting Charge would only be applicable to those Members whose overall 12-month trailing intraday backtesting coverage falls below the Coverage Target.

Although the fifth largest historical backtesting deficiency for a Member would be used as the Intraday Backtesting Charge in most cases, NSCC would retain discretion to adjust the charge amount based on other circumstances that might be relevant for assessing whether an impacted Member is likely to experience future backtesting deficiencies and the estimated size of such deficiencies. Examples of relevant circumstances that could be considered by NSCC in calculating the final, applicable Intraday Backtesting Charge amount include material differences among the Member's five largest intraday backtesting deficiencies observed over the prior 12-month period, variability in the net settlement activity after the collection of the Member's Required

²¹ Intraday backtesting would include 500 observations per year (twice per day over 250 observation days). Each occurrence of a backtesting deficiency would reduce a Member's overall backtesting coverage by 0.2 percent (1 exception / 500 observations). Accordingly, an Intraday Backtesting Charge equal to the fifth largest backtesting deficiency would have brought backtesting coverage up to 99.2 percent.

Deposit and observed market price volatility in excess of the Member's historical Volatility Charge. Based on NSCC's assessment of the impact of these circumstances on the likelihood, and estimated size, of future intraday backtesting deficiencies for a Member, NSCC may, in its discretion, adjust the Intraday Backtesting Charge for such Member in an amount that NSCC determines to be more appropriate for maintaining such Member's intraday backtesting results above the Coverage Target.

The resulting Intraday Backtesting Charge would be added to the Required Deposit for such Member and would be imposed on a daily basis for a one-month period.

In order to differentiate the Backtesting Charge assessed on the start of the day portfolio from the Backtesting Charge assessed on an intraday basis, NSCC would amend the Rules by adding a defined term "Regular Backtesting Charge" to Procedure XV, Section I.(B)(3).²²

2. <u>Communication with Members and Imposition of</u> <u>the Intraday Backtesting Charge</u>

If NSCC determines that an Intraday Backtesting Charge should apply to a Member who was not assessed an Intraday Backtesting Charge during the immediately preceding month or that the Intraday Backtesting Charge applied to a Member during the previous month should be increased, NSCC would notify the Member on or around the 25th calendar day of the month prior to the assessment of the Intraday Backtesting Charge or prior to the increase to the Intraday Backtesting Charge, as applicable, if not earlier.

²² <u>Supra</u> note 1.

NSCC would impose the Intraday Backtesting Charge as an additional charge applied to each impacted Member's Required Deposit on a daily basis for a one-month period and would review each applied Intraday Backtesting Charge each month. If an impacted Member's trailing 12-month intraday backtesting coverage exceeds the Coverage Target (without taking into account historically imposed Intraday Backtesting Charges), the Intraday Backtesting Charge would be removed.

E. Removal of the Specified Activity Charge from the Clearing Fund Formula

Currently, NSCC collects a Specified Activity charge, which is designed to cover the risk posed to NSCC by transactions that settle on a shortened cycle.²³ Such transactions pose an increased risk to NSCC because these trades settle on a shortened settlement cycle and may be guaranteed by NSCC prior to the collection of margin on them. The Specified Activity charge currently mitigates this risk by increasing the Required Deposit for a Member in relation to the number of Specified Activity trades submitted by the Member to NSCC over a 100-day look-back period. However, the risk posed to NSCC by Specified Activity would no longer be unique to such trade activity – the proposed accelerated trade guaranty would result in a similar risk to NSCC. The addition of the MRD and Coverage Components to the Clearing Fund formula would mitigate the risks posed by trades guaranteed by NSCC prior to the collection of margin on those trades. As a result, NSCC proposes to eliminate the Specified Activity charge because imposing a separate Specified Activity charge would no longer be necessary once the MRD and Coverage Components are added to the Clearing Fund formula.

²³ Examples of these trades can include next day settling trades, same day settling trades, cash trades or sellers' options.

F. Enhanced Intraday Mark-to-Market Margining

NSCC proposes to enhance its current intraday margining to further mitigate the intraday coverage gap risk that may be introduced to the Corporation as a result of the proposed accelerated trade guaranty. By way of background, NSCC currently collects a SOD mark-to-market margin, which is designed to mitigate the risk arising out of the value change between the contract/settlement value of a Member's open positions and the current market value, as part of its Clearing Fund formula. A Member's SOD mark-tomarket margin is calculated and collected as part of a Member's daily Required Deposit based on the Member's prior end-of-day positions. The SOD mark-to-market component of the daily Required Deposit is calculated to cover a Member's exposure due to market moves and/or trading and settlement activity by bringing the portfolio of open positions up to the current market value. However, because the SOD mark-to-market component is calculated only once daily using the prior end-of-day positions and prices, it will not cover a Member's exposure arising out of any intraday changes to position and market value in a Member's portfolio. Accordingly, NSCC currently collects intraday mark-tomarket margin from Members to cover additional risk exposure arising out of intraday position and market value changes to the Member's portfolio if the additional risks are sufficiently large to warrant the collection of an intraday margin.

NSCC has determined that it is not necessary to collect intraday margin from every Member that experiences an intraday mark-to-market change because the Volatility Charge already collected as part of Members' daily Required Deposits is calculated to cover projected changes in the contract/settlement value of a Member's portfolio and likely cover intraday changes to a Member's portfolio. However, in certain instances, Members may have intraday mark-to-market changes that are significant enough that NSCC is exposed to an increased risk of loss as a result of such Member's intraday activities. In particular, NSCC measures each Member's intraday mark-to-market exposure against the Volatility Charge. NSCC collects an intraday mark-to-market amount from any Member that has an intraday mark-to-market exposure that meets or exceeds a threshold percentage as compared to the Member's Volatility Charge. NSCC believes that such Members pose an increased risk of loss to the Corporation because the coverage provided by the Volatility Charge, which is designed to cover estimated losses to a portfolio over a specified time period, would be exhausted by an intraday mark-tomarket exposure so large that the Member's Required Deposit would potentially be unable to absorb further intraday losses to the Member's portfolio.

In order to further mitigate the risk posed to NSCC by the proposed accelerated trade guaranty, NSCC is proposing to enhance its collection of intraday mark-to-market margin. NSCC would impose the intraday mark-to-market margin amount at a lower threshold. Currently, NSCC makes an intraday mark-to-market margin call if a Member's intraday mark-to-market exposure meets or exceeds 100 percent of such Member's Volatility Charge; however, such threshold may be reduced by NSCC during volatile market conditions. With this proposal, NSCC would make an intraday margin call if a Member's Volatility Charge, where such threshold may still be reduced by NSCC during volatile market conditions. This proposed change would serve to collect intraday margin earlier and more proactively preserve the coverage provided by a Member's Volatility Charge and Required Deposit.

In addition, NSCC would monitor intraday changes to Member's mark-to-market exposure at regular intervals to further mitigate the risk posed to NSCC by the accelerated trade guaranty. By doing so, NSCC would be able to make intraday margin calls more frequently to those Members whose intraday mark-to-market exposures exceed the Volatility Charge threshold. Enhancing the collection of the intraday mark-tomarket amount so that it occurs earlier and more frequently would allow NSCC to reduce the amount of uncovered risk during the coverage gap and would therefore further mitigate the risk posed to the Corporation by the accelerated trade guaranty.

NSCC proposes to amend Procedure XV to include a description of the enhanced intraday mark-to-market margin charge that clarifies the circumstances and criteria for the assessment of an intraday mark-to-market call. This would ensure that Members are aware that the Corporation regularly monitors and considers intraday mark-to-market as part of its regular Clearing Fund formula.

G. Adjustments to the Calculation of the Excess Capital Premium Component

The Excess Capital Premium²⁴ is designed to address spikes in a Member's Required Deposit based upon any one day of activity. It is not designed to provide additional Required Deposits over an extended period of time. Currently, the Excess Capital Premium for a Member is calculated based upon the Member's Clearing Fund Required Deposit and the Member's excess net capital. With the addition of the MRD and the Coverage Component, NSCC proposes to exclude these charges from the

²⁴ The Excess Capital Premium is a charge imposed on a Member when the Member's Required Deposit exceeds its excess net capital, as described in Procedure XV.

calculation of the Excess Capital Premium. The MRD and the Coverage Component all utilize a historical look-back period, which accounts for the risk of such activity well after the relevant trades have settled. Risks related to such trades would be reflected in increased amounts assessed for these components over the subsequent time periods. If these components are included in the calculation of the Excess Capital Premium, especially during periods following an increase in activity, then the increased MRD and Coverage Component could lead to more frequent Excess Capital Premium charges over an extended period of time. This is not the intended purpose of the Excess Capital Premium and could place an unnecessary burden on Members.

(iii) <u>Proposed Changes to Procedure II (Trade Comparison and</u> <u>Recording Service)</u>

Next day settling index receipts may be guaranteed prior to the collection of margin reflecting such trades and thus carry a very similar risk as Specified Activity trades described above. More specifically, because these trades are settled on the day after they are received and validated by NSCC, NSCC currently attaches its guaranty to them at the time of validation, prior to the collection of a Required Deposit that reflects such trades. Unlike the risk from Specified Activity trades, which is mitigated by the Specified Activity charge, the risk for next day settling index receipts is currently mitigated by permitting NSCC to delay the processing and reporting of these trades if a Member's Required Deposit is not paid on time. However, like the risk associated with Specified Activity, under the proposed rule change, this risk would generally be mitigated by the addition of the MRD and the Coverage Component. Therefore, NSCC proposes to amend Procedure II²⁵ (Trade Comparison and Recording Service) to remove the language that permits NSCC to delay the processing and reporting of next day settling index receipts until the applicable margin on these transactions is paid.

(iv) Loss Allocation Provision for Off-the-Market Transactions

NSCC proposes to introduce a new loss allocation provision for any trades that fall within the proposed definition of "Off-the-Market Transactions" in order to limit NSCC's exposure to certain trades that have a price that differs significantly from the prevailing market price for the underlying security at the time the trade is executed. This provision would apply in the event that NSCC ceases to act for a Member that engaged in Off-the-Market Transactions and only to the extent that NSCC incurs a net loss in the liquidation of such Transactions.²⁶

NSCC would define "Off-the-Market Transactions" as either a single transaction or a series of transactions settled within the same cycle with greater than \$1 million in gross proceeds and either higher or lower than the most recently observed market price by a percentage amount based on market conditions and factors that impact trading

²⁵ <u>Supra note 1.</u>

²⁶ A net loss on liquidation of the Off-the-Market Transaction means that the loss on liquidation of the Member's portfolio exceeds the collected Required Deposit of the Member and such loss is attributed to the Off-the-Market Transaction. Such loss would be allocated directly and entirely to the Member that submitted the Off-the-Market Transaction, or on whose behalf the Off-the-Market Transaction was submitted, to NSCC; however, no allocation would be made if such Member has satisfied all applicable intraday mark-to-market margin charges assessed by NSCC with respect to the Off-the-Market Transaction.

behavior of the underlying security, including volatility, liquidity and other characteristics of such security.

The proposed rule change would establish the loss allocation for Off-the-Market Transactions. NSCC would allocate any losses to NSCC resulting from the liquidation of any guaranteed, open Off-the-Market Transaction of a defaulted Member directly and entirely to the surviving counterparty to that transaction. Losses would be allocated to counterparties in proportion to their specific Off-the-Market Transaction gain and would be allocated only to the extent of NSCC's loss; however, no allocation shall be made if the defaulted Member has satisfied all requisite intraday mark-to-market margin assessed by NSCC with respect to the Off-the-Market Transaction.²⁷

This proposed change would allow NSCC to mitigate the risk of loss associated with guaranteeing these Off-the-Market Transactions. The proposal recognizes that applying the accelerated trade guaranty to transactions whose price significantly differs from the most recently observed market price could inappropriately increase the loss that NSCC may incur if a Member that has engaged in Off-the-Market Transactions defaults and its open, guaranteed positions are liquidated. Members not involved in Off-the-Market Transactions, or not involved in Off-the-Market Transactions that result in losses to NSCC, would not be included in this process. This exclusion would apply only to losses that are attributable to Off-the-Market Transactions and would not exclude

²⁷ A Member's Off-the-Market Transaction that has been marked to market is, by definition, no longer an Off-the-Market Transaction when the mark-to-market component of the Member's Required Deposit is satisfied.

Members from other obligations that may result from any loss or liabilities incurred by NSCC from a Member default.

In order to implement this proposed change, NSCC would amend Rule 4²⁸ (Clearing Fund) to provide that, if a loss or liability of NSCC is determined by NSCC to arise in connection with the liquidation of any Off-the-Market Transactions, such loss or liability would be allocated directly to the surviving counterparty to the Off-the-Market Transaction that submitted the transaction to NSCC for clearing. NSCC would also amend Rule 1²⁹ (Definitions and Descriptions) to include a definition of Off-the-Market Transactions.

(v) <u>Technical Proposed Rule Change</u>

NSCC is proposing a change to Procedure XV³⁰ to clarify the calculation of the Regular Mark-to-Market component for CNS transactions. NSCC's historical and current policy for the calculation of any mark-to-market component of the Clearing Fund calculation for CNS trades and Balance Order trades is that where a credit is derived from a Member's mark-to-market calculation, the value of the calculation is adjusted to zero. When NSCC implemented the ID Net service,³¹ a provision was added to Procedure

³⁰ <u>Id.</u>

 $[\]frac{28}{\text{Supra}}$ note 1.

²⁹ <u>Id.</u>

³¹ NSCC's ID Net service is defined further in Rule 65. Rules, <u>supra</u> note 1. <u>See</u> Securities Exchange Act Release No. 57901 (June 2, 2008), 73 FR 32373 (June 6, 2008) (SR-NSCC-2007-14).

 XV^{32} that explicitly stated this policy as it relates to CNS transactions of subscribers to the ID Net service. This change inadvertently created an implication that the calculation of Regular Mark-to-Market credit for Members who were not ID Net Subscribers would not be set to zero. NSCC is proposing to revise the applicable provision to remove the reference to ID Net Subscribers.

Expected Effect on Risks to the Clearing Agency, Its Participants and the Market

The proposed rule changes would mitigate Member's counterparty risks and would enhance Members' ability to assess that risk by having NSCC become the central counterparty to CNS trades and by applying the trade guaranty to Balance Order trades at an earlier point in the settlement cycle.

Although the transfer of counterparty credit risk from Members to NSCC at an earlier point in the settlement cycle facilitates a shortened holding period of bilateral credit risk for the Members, it does increase risk to NSCC. However, as discussed below, NSCC believes that it is better equipped to manage that counterparty credit risk, including potential systemic impact, compared to the counterparties themselves.

Management of Identified Risks

The proposal is designed to mitigate counterparty risk while still protecting NSCC and its membership.

The proposed rule changes to (i) add the new components to the Clearing Fund formula and (ii) enhance the intraday mark-to-market margin process would allow NSCC

³² <u>Supra</u> note 1.

to appropriately collect additional margin to mitigate the exposure presented to NSCC by the accelerated trade guaranty. The proposal to introduce a new loss allocation provision for Off-the-Market Transactions would help NSCC to limit its exposure to Off-the-Market Transactions.

Specifically, the proposal to add the MRD, the Coverage Component and the Intraday Backtesting Charge to the Clearing Fund formula and to collect intraday markto-market margin at a lower threshold would mitigate the exposure presented to NSCC by the accelerated trade guaranty and permit NSCC to enhance its margin requirements to better limit its credit exposures to participants under normal market conditions.

In addition, NSCC's proposal to expand its current intraday margin collection to include (a) the collection of intraday mark-to-market margin at a lower threshold and (b) the collection of the Intraday Backtesting Charge would further enhance its intraday monitoring and its ability to measure credit exposures at least once a day.

Similarly, the proposed rule changes to introduce a new loss allocation provision for any trades that fall within the proposed definition of Off-the-Market Transactions would help NSCC to limit its exposure to certain trades that have a price that differs significantly from the most recently observed market price for the underlying security. Therefore, the reduction of NSCC's exposure to Off-the-Market Transactions would assist NSCC in responding to a Member default and would minimize potential losses to NSCC and its non-defaulting Members.

NSCC has also taken actions outside of the proposals described in this filing to strengthen its liquidity resources and to enable it to cover its total liquidity needs,

including any liquidity needs that would arise from the accelerated trade guaranty. NSCC calculates its liquidity need by assuming the failure of the Member (including the simultaneous default of the Member's affiliated family) that has the largest net settlement debit in extreme but plausible market conditions.³³ Although the proposal would increase the number of days for which NSCC would be required, under its Rules, to guarantee settlement to include T and T+1 trades, the Rules currently provide that it may, although it is not legally obligated to, optionally guarantee these trades. Given NSCC's role in promoting safety, soundness and stability in the U.S. equities markets, NSCC currently includes these trades in its daily liquidity need analyses to account for the circumstances where this optional guaranty would be called upon. NSCC has never actually experienced a liquidity shortfall in the close out of a defaulted Member.

NSCC measures the potential liquidity impact of the accelerated trade guaranty on a daily basis. NSCC has enhanced its liquidity resources through the implementation of NSCC's supplemental liquidity deposit ("SLD") requirements.³⁴ NSCC's SLD requirements were designed to require Members with historically elevated options activity to provide supplemental liquidity deposits in advance of and in anticipation of options expiry periods, as well as to accept voluntary pre-funded supplemental liquidity

³³ Every day NSCC measures the liquidity obligations of each of NSCC's Members by taking the sum of their purchase obligations on that day from CNS and for the following three settlement days, and then, taking into account certain adjustments, assumptions and offsets, NSCC identifies the largest Member liquidity need on each day and, determines if the available liquidity resources are adequate to cover that largest liquidity need or if there is a projected liquidity shortfall.

³⁴ Securities Exchange Act Release No. 70999 (December 5, 2013), 78 FR 75413 (December 11, 2013) (SR-NSCC-2013-02).

deposits from other Members who anticipate elevated liquidity needs during these periods. As such, the SLD requirements provide NSCC with the needed liquidity resources to address any liquidity shortfalls that may be experienced under the accelerated trade guaranty settlement cycle. Furthermore, NSCC has established a liquidity program to raise prefunded liquidity through the issuance and private placement of short-term, unsecured notes ("Prefunded Liquidity Program"), which may consist of a combination of commercial paper notes and extendible notes.³⁵ Proceeds from the Prefunded Liquidity Program further supplement NSCC's existing default liquidity risk management resources.

Consistency with the Clearing Supervision Act

The objectives and principles of Section 805(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act entitled the Payment, Clearing, and Settlement Supervision Act of 2010 ("Clearing Supervision Act") are to promote robust risk management, promote safety and soundness, reduce systemic risks, and support the stability of the broader financial system.³⁶

The proposal to accelerate the time that NSCC's trade guaranty attaches to trades submitted to it for clearing has been designed to promote robust risk management, promote safety and soundness, reduce systemic risks and support the stability of the broader financial system in furtherance of the Clearing Supervision Act. Specifically, NSCC would provide a trade guaranty to CNS trades and Balance Order trades at an

 ³⁵ Securities Exchange Act Release No. 75730 (August 19, 2015), 80 FR 51638 (August 25, 2015) (SR-NSCC-2015-802).

³⁶ 12 U.S.C. 5464(b).

earlier point in the settlement cycle. The proposed rule changes would mitigate counterparty risk and would enhance NSCC Members' ability to assess that risk by having NSCC become the central counterparty to CNS trades and by applying the trade guaranty to Balance Order trades at an earlier point in the settlement cycle. The transfer of counterparty credit risk from Members to NSCC at an earlier point in the settlement cycle facilitates a shortened holding period of bilateral credit risk for the counterparties by transferring the obligation onto NSCC, which is better equipped to manage that counterparty credit risk, including potential systemic impact, compared to the counterparties themselves. Therefore, NSCC believes the proposal to accelerate the trade guaranty would promote robust risk management, promote safety and soundness, reduce systemic risks and support the stability of the broader financial system, consistent with the objectives and principles of Section 805(b) of the Clearing Supervision Act cited above.

The proposed rule changes to enhance the Clearing Fund formula and to introduce a new loss allocation provision for Off-the-Market Transactions have been designed to promote robust risk management and promote safety and soundness in furtherance of the Clearing Supervision Act. In conjunction with the enhanced trade processing in the form of the accelerated trade guaranty, the proposed additional Clearing Fund components and enhancements to NSCC's current intraday mark-to-market margin process would allow NSCC to appropriately manage its risk by collecting additional margin to mitigate the exposure presented to NSCC by the accelerated trade guaranty. Additionally, the proposal to introduce a new loss allocation provision for any trades that fall within a proposed definition of "Off-the-Market Transactions" would help NSCC to limit its exposure to certain trades that have a price that differs significantly from the most recently observed market price for the underlying security. Together, the collection of additional margin and the reduction of NSCC's exposures to "Off-the-Market Transactions" would assist NSCC in responding to a Member default and would minimize potential losses to NSCC and its non-defaulting Members. Therefore, NSCC believes the proposed enhancements to the Clearing Fund formula and the introduction of an Off-the-Market Transaction allocation process would also promote robust risk management and promote safety and soundness, consistent with objectives and principles of Section 805(b) of the Clearing Supervision Act, cited above.

The proposal is also consistent with Rules 17Ad-22(b)(1) and (b)(2), promulgated under the Act. Rule 17Ad-22(b)(1) requires NSCC to establish, implement, maintain and enforce written policies and procedures reasonably designed to measure its credit exposures to its participants at least once a day and limit its exposures to potential losses from defaults by its participants under normal market conditions so that the operations of NSCC would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.³⁷ NSCC's proposal to expand its current intraday margin collection to include (a) the collection of intraday mark-to-market margin at a lower threshold and (b) the collection of the Intraday Backtesting Charge would further enhance its intraday monitoring and its ability to measure credit exposures at least once a day. The proposal to enhance the amount of margin collected from each Member would help NSCC to limit its exposure to potential losses from defaults by its

³⁷ 17 CFR 240.17Ad-22(b)(1).

participants under normal market conditions and reduce risk of loss mutualization to the NSCC membership. Similarly, the proposal to introduce a new loss allocation provision for Off-the-Market Transactions would also help NSCC to limit its exposure to potential losses from defaults by its participants under normal market conditions. Therefore, NSCC believes the proposals are consistent with the requirements of Rule 17Ad-22(b)(1), promulgated under the Act, cited above.

Rule 17Ad-22(b)(2) requires NSCC to establish, implement, maintain and enforce written policies and procedures reasonably designed to "use margin requirements to limit its credit exposures to participants under normal market conditions and use risk-based models and parameters to set margin requirements."³⁸ The proposal to add the MRD, the Coverage Component and the Intraday Backtesting Charge to the Clearing Fund formula and to collect intraday mark-to-market margin at a lower threshold in order to mitigate the exposure presented to NSCC by the accelerated trade guaranty would enable NSCC to enhance its margin requirements to better limit its credit exposures to participants under normal market conditions. Therefore, NSCC believes the proposed changes are consistent with the requirements of Rule 17Ad-22(b)(2), promulgated under the Act, cited above.

The proposed changes to NSCC's Clearing Fund formula and the intraday margin process are also designed to be consistent with Rules 17Ad-22(e)(4) and (e)(6) of the Act,

³⁸ 17 CFR 2

¹⁷ CFR 240.17Ad-22(b)(2).

which were recently adopted by the Commission.³⁹ Rule 17Ad-22(e)(4) will require NSCC to establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those exposures arising from its payment, clearing, and settlement processes.⁴⁰ NSCC's proposal to expand its current intraday margin collection to include (a) the collection of intraday mark-to-market margin at a lower threshold and (b) the collection of the Intraday Backtesting Charge would enhance its ability to identify, measure, monitor and manage its credit exposures to participants. The proposal to enhance the amount of margin NSCC collected from each Member and to introduce a new loss allocation provision for Off-the-Market Transactions would further help NSCC to manage its credit exposures to participants and those exposures arising from its payment, clearing, and settlement processes. Therefore, NSCC believes these proposals are consistent with the requirements of Rule 17Ad-22(e)(4), promulgated under the Act, cited above.

Rule 17Ad-22(e)(6) will require NSCC to establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that is monitored by

³⁹ The Commission adopted amendments to Rule 17Ad-22, including the addition of new section 17Ad-22(e), on September 28, 2016. See Securities Exchange Act Release No. 78961 (September 28, 2016), 81 FR 70786 (October 13, 2016) (S7-03-14). The amendments to Rule 17ad-22 become effective on December 12, 2016. Id. NSCC is a "covered clearing agency" as defined in Rule 17Ad-22(a)(5) and must comply with new section (e) of Rule 17Ad-22 by April 11, 2017. Id.

 ⁴⁰ See Securities Exchange Act Release No. 78961 (September 28, 2016), 81 FR 70786 (October 13, 2016) (S7-03-14).

management on an ongoing basis and regularly reviewed, tested, and verified.⁴¹ The proposal to add the MRD, the Coverage Component and the Intraday Backtesting Charge to the Clearing Fund formula and to collect intraday mark-to-market margin at a lower threshold would help NSCC to cover its credit exposures to its participants by establishing a risk-based margin system that is monitored by management on an ongoing basis and regularly reviewed, tested, and verified. Therefore, NSCC believes this proposal is consistent with the requirements of Rule 17Ad-22(e)(6), promulgated under the Act, cited above.

Implementation Timeframe

Pending Commission approval, Members would be advised of the implementation date of this proposal through issuance of an NSCC Important Notice. NSCC expects to run the proposed changes in a test environment for a parallel period of at least three months prior to implementation. Details and dates regarding such test period would be communicated to Members through an NSCC Important Notice.

III. Date of Effectiveness of the Advance Notice, and Timing for Commission Action

The proposed change may be implemented if the Commission does not object to the proposed change within 60 days of the later of (i) the date that the proposed change was filed with the Commission or (ii) the date that any additional information requested by the Commission is received. The clearing agency shall not implement the proposed change if the Commission has any objection to the proposed change.

⁴¹ <u>Id.</u>

The Commission may extend the period for review by an additional 60 days if the proposed change raises novel or complex issues, subject to the Commission providing the clearing agency with prompt written notice of the extension. A proposed change may be implemented in less than 60 days from the date the advance notice is filed, or the date further information requested by the Commission is received, if the Commission notifies the clearing agency in writing that it does not object to the proposed change and authorizes the clearing agency to implement the proposed change on an earlier date, subject to any conditions imposed by the Commission.

The clearing agency shall post notice on its website of proposed changes that are implemented.

The proposal shall not take effect until all regulatory actions required with respect to the proposal are completed.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the Advance Notice is consistent with the Clearing Supervision Act. Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commission's Internet comment form (http://www.sec.gov/rules/sro.shtml); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number SR-NSCC-2016-803 on the subject line.

Paper Comments:

• Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549.

All submissions should refer to File Number SR-NSCC-2016-803. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the Advance Notice that are filed with the Commission, and all written communications relating to the Advance Notice between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of NSCC and on DTCC's website (http://dtcc.com/legal/sec-rule-filings.aspx). All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-NSCC-2016-803 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

By the Commission.

Page 52 of 67

Exhibit 5



TEXT OF PROPOSED RULE CHANGE

Underlined and boldface text indicates new text Strikethrough and boldface indicates deleted text [Bracketed, underlined, boldface and blue] text indicates proposed rule changes in connection with a separate proposal that have not yet been approved

RULE 1. DEFINITIONS AND DESCRIPTIONS

Unless the context requires otherwise, the terms defined in this Rule shall, for all purposes of these Rules, have the meanings herein specified.

* *

Off-the-Market Transaction

The term "Off-the-Market Transaction" shall mean either of the following:

(1) A single transaction that is: (a) greater than \$1 million in gross proceeds and (b) on the day of the submission of the transaction to the Corporation, either higher or lower than the most recently observed market price of the underlying Cleared Security by a percentage amount determined by the Corporation based upon market conditions and factors that impact trading behavior of the underlying Cleared Security, including the volatility, liquidity and other characteristics of such security; or

(2) A series of transactions submitted by or on behalf of two Members within the same settlement cycle that, if looked at as a single transaction, would be encompassed by subsection (1) of this definition.

*

* *

RULE 4. CLEARING FUND

* * *

SEC. 3. If a Member, Mutual Fund/Insurance Services Member, Insurance Carrier/Retirement Services Member or Fund Member is obligated to the Corporation, other than for a pro rata charge governed by Section 5 of this Rule, and (i) fails to satisfy the obligation or (ii) the obligation is a Cross-Guaranty Obligation, the Corporation shall apply to such obligation the portion, of the participant's actual deposit necessary to eliminate the obligation. Upon the Corporation's demand the participant shall deposit in the Clearing Fund, within such time as the Corporation shall require, that which is necessary to eliminate any resulting deficiency in his Required Deposit. If the participant shall fail to do so, the Corporation may take disciplinary action against such participant pursuant to Rule 46 or Rule 48. Any disciplinary action which the Corporation takes pursuant to Rule 46 or Rule 48 or the voluntary or involuntary cessation of membership by the participant shall not affect the obligations of the participant to the Corporation or any remedy to which the Corporation may be entitled under applicable law.

In applying a Member's or Mutual Fund/Insurance Services Member's actual deposit to his obligations to the Corporation, the Corporation shall first apply that portion of his actual deposit which has been allocated to the Mutual Fund Allocation to obligations arising in the Mutual Fund Services, to the Insurance Allocation to obligations arising in the Insurance and Retirement Processing Services and to any Fund to obligations arising in the System to which the Fund pertains. If after such application the participant remains obligated in one or more Systems, the Corporation shall apply any remaining deposit to his remaining obligation to each such System, in the same proportion that each obligation bears to the total remaining obligations to the Systems. If the participant thereafter remains obligated to the Corporation, any remaining deposit shall be applied thereto.

Notwithstanding the foregoing, to the extent that a loss or liability of the Corporation is determined by the Corporation to arise in connection with an Off-the-Market Transaction, it shall be allocated directly and entirely to the Member that submitted the Off-the-Market Transaction, or on whose behalf the Off-the-Market Transaction was submitted, to the Corporation; however, no allocation shall be made if such Member has satisfied all applicable intraday mark-to-market margin charges assessed by the Corporation with respect to the Off-the-Market Transaction, as permitted by these Rules and Procedures.

* * *

PROCEDURE II. TRADE COMPARISON AND RECORDING SERVICE

* * *

F. Index Receipts

* * *

2. Creation/Redemption Input

On T, by such time as established by the Corporation from time to time, an Index Receipt Agent may submit to the Corporation on behalf of Members, index receipt creation and redemption instructions and their scheduled settlement date, the final Dividend/Balancing Cash Amount relative to such instructions and a transaction amount representing the Index Receipt Agent's fee for the processing of the index receipt. The Index Receipt Agent may elect a Settlement Date of T+1, T+2 or T+3 for the Index Receipts and the component securities or cash. The Index Receipt Agent may submit as-of index creation and redemption instructions, but only if such as-of data is submitted by the cut-off time as designated by the Corporation from time to time, with next day settling creates and redeems required to be submitted by such cut-off time on T.

On T, the Corporation will report to Members on the Index Receipt Detail Report the details of the creations and redemptions submitted, the gross quantity of underlying security components of creation and redemption instructions and the quantity of index receipt shares associated with particular creation and redemption activity. The report will also indicate the final Dividend/Balancing Cash Amount that must be paid or received and the transaction amount that must be paid on Settlement Date. The Corporation may remove next day settling index receipt transactions (including T+2 settling as-of creates and redeems submitted on T+1) from the system if either the Member or Index Receipt Agent to the applicable trade has not timely satisfied its Clearing Fund obligation on Settlement Date.

3. Settlement

Index receipts and the underlying component securities which are eligible for CNS or cash, if applicable, will be reported on the <u>next available</u> Consolidated Trade Summary, or, in the case of next day settling index receipts, the Second Supplemental Consolidated Trade Summary. The applicable Consolidated Trade Summary will also separately indicate the other component securities, or cash component, if applicable, due to settle. Component securities will be netted with all other CNS and Non-CNS securities and entered into the CNS and Balance Order Accounting operations for settlement. Subject to the provisions of Section F. 2. of this Procedure, next day settling index receipts which are CNS eligible will be processed in the day cycle of the CNS Accounting Operation after receipt of applicable Clearing Fund payments.

* * *

PROCEDURE XV. CLEARING FUND FORMULA AND OTHER MATTERS¹

I.(A) Clearing Fund Formula for Members

Each Member of the Corporation, except as otherwise provided in this Procedure, is required to contribute to the Clearing Fund maintained by the Corporation an amount calculated by the Corporation equal to:

(1) For CNS Transactions

* * *

(b) The net of each day's difference between (x) the contract price of such Member's Regular Way, When-Issued and When-Distributed net positions for transactions not submitted through the ID Net service that have not yet passed Settlement Date and its fail positions, and (y) the Current Market Price for such positions² (such difference to be known as the "Regular Mark-to-Market"); provided that: (i) the Corporation shall exclude from this calculation any trades for which the Corporation has, under a Clearing Agency Cross-Guaranty Agreement, either obtained coverage for such difference (if the sum of the differences for the trades subject to the agreement is a positive number) or undertaken an obligation to provide coverage for such difference (if the sum of the differences for trades subject to the agreement is a negative number), (ii) the Corporation may, but shall not be required to, exclude from this calculation any shares delivered by the Member in the night cycle to satisfy all or any portion of a short position, and (iii) that if the Member is an ID Net Subscriber and if the value of the Regular Mark-to-Market as computed above is a positive number, then the value of the Regular Mark-to-Market shall be zero;

plus

(c) If such Member is an ID Net Subscriber, the net of each day's difference between (x) the contract price of -the net positions attributable to such Member's transactions submitted through the ID Net service, and (y) the Current Market Price for such positions (such difference to be known as the "ID Net Mark-to-Market"), provided that if the value of the ID Net Mark-to-Market as computed above is a positive number, then the value of the ID Net Mark-to-Market shall be zero-:

plus

¹ All calculations shall be performed daily or, if the Corporation deems it appropriate, on a more frequent basis.

² For fail positions, the contract price used for this purpose is the prior day's Market Price.

(d) If such Member clears for one or more Market Makers³ (i.e., the Member's Correspondent(s)) or is itself a Market Maker in any security dominated by either the Member or its Correspondent(s) (where domination is calculated for each Member and each of its Correspondent(s) according to criteria determined by the Corporation from time to time), and if the sum of the absolute values of the Net Unsettled Positions in such dominated security or securities of any one or more of such Market Makers exceeds the excess net capital of the respective Market Maker or the Member (whether or not it is a Market Maker), (i.e., such Market Maker's or Member's Excess), the Corporation may then require the Member to contribute an additional Clearing Fund Deposit to the Corporation either in an amount equal to each such Market Maker's or Member's Excess or the sum of each of the absolute values of the Net Unsettled Positions or a combination of both. In performing the calculation, the Corporation may take into account offsetting pending (i.e., non-fail) transactions that have been confirmed and/or affirmed through an institutional delivery system acceptable to the Corporation. In addition, where a Market Maker's Net Unsettled Positions in dominated issues are cleared by one or more Members, the Corporation may treat those positions, for purposes of calculations pursuant to this paragraph, as if they were all cleared by the Market Maker's clearing Member, as listed in the records of the Corporation in accordance with Section 3(e) of Rule 3^4 ;

plus

(e) An additional payment ("special charge") from Members in view of price fluctuations in or volatility or lack of liquidity of any security. The Corporation shall make any such determination based on such factors as the Corporation determines to be appropriate from time to time;

plus

(f) 5% or such greater amount, as determined by the Corporation, not to exceed 10% of such Member's long fail CNS positions plus 5%, or such greater amount, as determined by the Corporation, not to exceed 10% of such Member's short fail CNS positions, **plus.**;

<u>plus</u>

(g) a margin requirement differential component charge calculated as the sum of the exponentially weighted moving average ("EWMA") of

³ As used in this Procedure, the term <u>"</u>AMarket Maker@" shall mean a member firm of FINRA that is registered by FINRA as a Market Maker.

⁴ The Corporation may require or permit such Member to deliver some or all shares necessary to complete a short obligation in lieu of part or all of its requirement under this section or subsection I.(A)(2)(c).

the daily positive changes over a 100-day look back period in the Member's (i) Regular Mark-to-Market component, (ii) ID Net Mark-to-Market component and (iii) volatility component, times a multiplier calibrated based on backtesting results;

<u>plus</u>

(h) a coverage component charge calculated as the EWMA of the Member's daily backtesting coverage deficiency amount over a 100day look back period; the Member's backtesting deficiency amount for each day is determined as the difference between the simulated profit and loss on the Member's portfolio and the sum of the Member's (i) volatility component, (ii) margin requirement differential component, (iii) Illiquid Charge and (iv) Market Maker domination charge.

(g) an amount for certain activity (referred to as "Specified Activity") based on the average of the Member's three highest aggregate calculated charges for daily Specified Activity measured over the most recent 20 settlement days. For purposes of this calculation, "Specified Activity" means transactions (other than Index Receipt creates and redeems and their underlying component securities, or cash component, if applicable) processed by the Corporation on a shortened processing cycle (i.e., otherwise than on a three-day processing and settlement cycle), including T+3 as-of trades,⁵ cash trades, next day settling trades, and similar transactions. This charge shall be calculated by: (i) netting Specified Activity by cusip to a single long or short position, and (ii) applying a charge to each such position, using not less than two standard deviations as determined by historic pricing. The standard deviations will be the same as those derived for the daily volatility calculations; provided however, that as is the case with the volatility charge, for those securities whose volatility is either less amenable to statistical analysis, or so amenable only in a complex manner, the Corporation shall instead apply the same percentage charge to those securities as applied pursuant to clause I.(A)(1)(a) above.

(2) For Balance Order Transactions

* * *

That is, as-of trades compared or recorded on T+3 prior to the applicable comparison/recording cut-off time, including trades received after the applicable T+2 cut-off time. With respect to next day settling trades, this includes next day as-of trades.

(b) The net of each day's difference between the contract price of such Member's Net Balance Order Unsettled Positions, and the Current Market Price for such positions <u>(such difference to be known as the "Regular</u> <u>Mark-to-Market"</u>), provided that the Corporation shall exclude from this calculation any trades for which the Corporation has, under a Clearing Agency Cross-Guaranty Agreement, either obtained coverage for such difference (if the sum of the differences for the trades subject to the agreement is a positive number) or undertaken an obligation to provide coverage for such difference (if the sum of the differences for trades subject to the agreement is a negative number);

plus

(c) If such Member clears for one or more Market Makers (i.e., the Member's Correspondent(s)) or is itself a Market Maker in any security dominated by either the Member or its Correspondent(s) (where domination is calculated for each Member and each of its Correspondent(s) according to criteria determined by the Corporation from time to time), and if the sum of the absolute values of the Net Balance Order Unsettled Positions in such dominated security or securities of any one or more of such Market Makers exceeds the excess net capital of the respective Market Maker or the Member (whether or not it is a Market Maker), (i.e., such Market Maker's or Member's Excess), the Corporation may then require the Member to contribute an additional Clearing Fund Deposit to the Corporation either in an amount equal to each such Market Maker's or Member's Excess or the sum of each of the absolute values of the Net Balance Order Unsettled Positions or a combination of both. In performing the calculation, the Corporation may take into account offsetting pending (i.e., non-fail) transactions that have been confirmed and/or affirmed through an institutional delivery system acceptable to the Corporation. In addition, where a Market Maker's Net Balance Order Unsettled Positions in dominated issues are cleared by one or more Members, the Corporation may treat those positions, for purposes of calculations pursuant to this paragraph, as if they were all cleared by the Market Maker's clearing Member, as listed in the records of the Corporation in accordance with Section 3(e) of Rule 3;

plus

(d) An additional payment ("special charge") from Members in view of price fluctuations in or volatility or lack of liquidity of any security. The Corporation shall make any such determination based on such factors as the Corporation determines to be appropriate from time to time, **plus**;

<u>plus</u>

(e) a margin requirement differential component charge calculated as the sum of the EWMA of the daily positive changes over a 100-day look back period in the Member's (i) Regular Mark-to-Market component and (ii) volatility component, times a multiplier calibrated based on backtesting results:

<u>plus</u>

(f) a coverage component charge calculated as the EWMA of the Member's daily backtesting coverage deficiency amount over a 100day look back period; the Member's backtesting deficiency amount for each day is determined as the difference between the simulated profit and loss on the Member's portfolio and the sum of the Member's (i) volatility component, (ii) margin requirement differential component, (iii) Illiquid Charge and (iv) Market Maker domination charge.

(e) an amount for certain activity (referred to as "Specified Activity") based on the average of the Member's three highest aggregate calculated charges for daily Specified Activity measured over the most recent 20 settlement days. For purposes of this calculation, "Specified Activity" means transactions (other than Index Receipt creates and redeems and their underlying component securities, or cash component, if applicable) processed by the Corporation on a shortened processing cycle (i.e., otherwise than on a three-day processing and settlement cycle), including T+3 as-of trades, ⁶ cash trades, next day settling trades, and similar transactions. This charge shall be calculated by: (i) netting Specified Activity by cusip to a single long or short position, and (ii) applying a charge to each such position, using not less than two standard deviations as determined by historic pricing. The standard deviations will be the same as those derived for the daily volatility calculations; provided however, that as is the case with the volatility charge, for those securities whose volatility is either less amenable to statistical analysis, or so amenable only in a complex manner, the Corporation shall instead apply the same percentage charge to those securities as applied pursuant to clause I.(A)(1)(a) above.

* * *

⁶ That is, as-of trades compared or recorded on T+3 prior to the applicable comparison/recording cut-off time, including trades received after the applicable T+2 cut-off time. With respect to next day settling trades, this includes next day as-of trades.

Page 62 of 67

I.(B) Additional Clearing Fund Formula

* * *

(2) Excess Capital Premium

If a Member's contribution to the Clearing Fund, as computed pursuant to Section I.(A) of this Procedure (but excluding any charges as set forth in Subsections I.(A)(1)(d), **I.(A)(1)**(e), **(g) and (h)**, **and** I.(A)(2)(c), **and I.(A)(2)**(d), **(e) and (f)** of this Procedure), plus any amount collected pursuant to 1.(B)(1) above or Rule 15 (such aggregate amount referred to as the "Calculated Amount"), when divided by its excess net capital or capital (as applicable), as defined in the membership standards set forth in Addendum B, is greater than 1.0 (the "Excess Capital Ratio"), then the Corporation may require such Member to deposit, within such timeframe as the Corporation may require, an additional amount (the "Excess Capital Premium") to the Clearing Fund equal to the product of: (a) the amount by which the Calculated Amount exceeds its excess net capital or capital (as applicable), as defined in the membership standards set forth in Addendum B, multiplied by (b) its Excess Capital Ratio.

Notwithstanding the foregoing, the Corporation may: (i) collect an amount less than the Excess Capital Premium (including no premium), and (ii) return all or a portion of the Excess Capital Premium if it believes that the imposition or maintenance of the Excess Capital Premium is not necessary or appropriate.⁷⁵

[(3) Backtesting Charge

The Corporation may require a Member to make an additional Clearing Fund deposit to mitigate exposures to the Corporation caused by settlement risks that may not be adequately captured by the Corporation's portfolio volatility model ("Backtesting Charge"). The Corporation may assess this charge both on the start of the day portfolio (the "Regular Backtesting Charge") or on an intraday basis (the "Intraday Backtesting Charge"), as needed, to enable the Corporation to achieve its backtesting coverage target. The Backtesting Charge may apply to Members that have

⁷⁵ The Corporation has identified the following guidelines or circumstances, which are intended to be illustrative, but not limited, where the premium will not be imposed: (a) where the premium results from charges applied with respect to municipal securities trades settling in CNS, where the member has offsetting compared trades settling on a trade-for-trade basis through DTC; and (b) management will look to see whether the premium results from an unusual or non-recurring circumstance where management believes it would not be appropriate to assess the premium. Examples of such circumstances are a member's late submission of trade data for comparison or trade recording that would otherwise reduce the margined position if timely submitted, or an unexpected haircut or capital charge that does not fundamentally change its risk profile.

12-month trailing backtesting coverage below the 99 percent backtesting coverage target. The Regular Backtesting Charge and the Intraday Backtesting Charge shall generally be equal to the Member's third largest deficiency and fifth largest deficiency, respectively, that occurred during the previous 12 months. The Corporation may in its discretion adjust such charge if the Corporation determines that circumstances particular to a Member's settlement activity and/or market price volatility warrant a different approach to determining or applying such charge in a manner consistent with achieving the Corporation's backtesting coverage target.

(4) Bank Holiday Charge

For purposes of this section, "Holiday" means any day on which equities markets are open for trading, but the Board of Governors of the Federal Reserve System observes a holiday and banks are closed.

On the business day prior to any Holiday, the Corporation may require each Member to make an additional Clearing Fund deposit ("Bank Holiday Charge"). The Bank Holiday Charge approximates the exposure that a Member's trading activity on the applicable Holiday could pose to the Corporation. Since the Corporation cannot collect margin on the Holiday, the Bank Holiday Charge is due on the business day prior to the applicable Holiday.

The methodology for calculating a Bank Holiday Charge shall be determined by the Corporation in advance of each applicable Holiday. The Bank Holiday Charge approximates each Member's Required Deposit to address the exposure that such Member's trading activity on the Holiday could pose to the Corporation. The Corporation shall have the discretion to calculate the Bank Holiday Charge based on its assessment of market conditions at the time the Bank Holiday Charge is calculated (such as, for example, significant market occurrences that could impact market price volatility). The Corporation shall inform Members of the methodology it will use to calculate the Bank Holiday Charge by an Important Notice issued no later than 10 business days prior to the day on which the applicable Bank Holiday Charge is be applied. Examples of potential methodologies for the Bank Holiday Charge may include, but shall not be limited to, time scaling of the volatility charge or a stress scenario that reflects potential market price volatility on the Holiday.]

(5) Intraday Mark-to-Market Charge

The Corporation may also collect a payment on an intra-day basis that is calculated as the difference between (x) the most recent mark-to-market price of a Member's net CNS and Balance Order positions (including its CNS failed positions) and (y) the most recently observed market price for

such positions if such difference meets or exceeds 80 percent of the Member's volatility component. The Corporation may reduce such threshold during volatile market conditions if the Corporation determines that a reduction of the threshold is appropriate to mitigate risks to the Corporation by accelerating the collection of anticipated additional margin from Members whose portfolios may present relatively greater risks to the Corporation on an overnight basis.

* *

I.(C) Clearing Fund Formula for Mutual Fund/Insurance Services Members who use the Mutual Fund Services.⁸⁶

* *

- II. Minimum Clearing Fund and Additional Deposit Requirements
- (A) Each Member of the Corporation shall be required to contribute a minimum of \$10,000 (the "minimum contribution"). The first 40% (but no less than \$10,000) of a Member's Required Deposit must be in cash and the remaining amount, may be evidenced by open account indebtedness secured by the pledge of Eligible Clearing Fund Securities, which shall be valued, for collateral purposes, as set forth in subsection III below. A Mutual Fund/Insurance Services Member's entire deposit is required to be in cash.
 - 1. Special Provisions Related to Eligible Clearing Fund Securities:
 - (a) Any deposits of Eligible Clearing Fund Agency Securities⁹⁷ or Eligible Clearing Fund Mortgage-Backed Securities¹⁰⁸, respectively, in excess of 25 percent of the Member's Required Deposit will be subject to an additional haircut equal to twice the percentage as

⁸⁶ This section applies to entities whose use of the Corporation's services are restricted to the Mutual Fund Services and/or the Insurance and Retirement Processing Services. Entities which use or are permitted to use Services other than or in addition to the Mutual Fund Services and Insurance and Retirement Processing Services are covered by section I.(A).

⁹⁷ A Member that is an Agency may not pledge Eligible Clearing Fund Agency Securities of which it is the issuer.

¹⁰⁸ With regard to a Member that pledges Eligible Clearing Fund Mortgage-Backed Securities of which it is the issuer, such securities will be subject to a premium haircut, as set forth in subsection III below.

specified in the proposed haircut schedule detailed in subsection III below, and

(b) No more than 20 percent of a Member's Required Deposit secured by pledged Eligible Agency Securities may be of a single issuer.

* * *

ADDENDUM K

INTERPRETATION OF THE BOARD OF DIRECTORS APPLICATION OF CLEARING FUND

Pursuant to Rule 47, the Board of Directors has the authority to interpret the Rules of the Corporation. The purpose of this interpretation is to clarify certain provisions of Rule 4 and the extent to which the Clearing Fund may be applied to a loss or liability of the Corporation.

- I. APPLICATION OF THE CLEARING FUND TO LOSSES SUSTAINED BY A SYSTEM
 - 1. Section 1 of Rule 4 provides that each Member's Required Deposit shall be allocated by the Corporation among the services for which the Corporation assumes responsibility for completion of transactions and which are designated as such by the Corporation (collectively the "Systems" and individually a "System") and in which the Member participates.
 - 2. The Corporation has in practice assumed responsibility for completion of transactions in each of the following services, and has deemed each of these services to be a System, even though the Corporation has not previously made a formal designation of each such service as a System within the definition of Section 1 of Rule 4:

The Corporation guarantees the completion of compared and locked-in CNS and balance orders transactions from a fixed point in the clearance and settlement process.¹ CNS transactions are guaranteed as of the <u>point they have: (i) for bilateral</u> <u>submissions by Members, been validated and compared by</u> <u>the Corporation pursuant to these Rules and Procedures, and</u> (ii) for locked-in submissions, been validated by the <u>Corporation pursuant to these Rules and Procedures.</u> later of: (i) midnight of T+1, and (ii) midnight of the day they are reported as compared or as of midnight on the day they appear on reports/output for locked-in trades. With respect to <u>bB</u>alance order transactions, such transactions are guaranteed as of the later of: (i) midnight of T+1, and (ii) midnight of the

 ¹ The trade guarantee of obligations arising out of the exercise or assignment of options that are settled at the Corporation is addressed in a separate arrangement between NSCC and Options Clearing Corporation, as referred to in Procedure III of the Rules, and is not addressed in these Rules.

day they are reported to Members as compared/recorded on contracts and, in either case, point they have: (i) for bilateral submissions by Members, been validated and compared by the Corporation pursuant to these Rules and Procedures, and (ii) for locked-in submissions, been validated by the Corporation pursuant to these Rules and Procedures through the close of business on T+3. The Corporation guarantees same day and one day settling trades as of the completion of trade comparison or trade recording processing and with respect to balance order transactions, the Corporation guarantees same day and one day settling trades as of the completion of trade comparison or trade recording through T+3; provided, however, that: i) for transactions relating to one day index receipt creates and redeems, including their underlying components, and unless otherwise removed from processing pursuant to Procedure II. H. 2, such transactions will be guaranteed after such time on Settlement Date as the **Corporation determines to complete processing of such items** in the day cycle of the CNS Accounting Operation, and (ii) ilf the contra party to a same day or one day settling trade is a member of an interfacing clearing corporation, such guarantee shall not be applicable unless an agreement to guarantee such trade exists between the Corporation and the interfacing clearing corporation. The Corporation has also adopted a policy of guaranteeing the completion of when-issued and when-distributed trades, as of the later of: (i) midnight of T+1, and (ii) midnight of the day the trades are reported to Members as compared/recorded on contracts point they have: (i) for bilateral submissions by Members, been validated and compared by the Corporation pursuant to these Rules and Procedures, and (ii) for locked-in submissions, been validated by the Corporation pursuant to these Rules and Procedures and will consider all when-issued and when-distributed trades of Members as if they were CNS transactions for surveillance purposes regardless of the accounting operation in which they ultimately settle.

* * *